Lesson 2 - Medical Reports

Section I. OUTPATIENT REPORTS

A. HISTORY - PHYSICALS

History-physicals are generally developed at the patient entry level, which is the first time the doctor sees and examines a patient. A history is done (what has happened to the patient in the current problem and any relative past history), and the physical examination is performed; this information is then dictated. History-physicals may include the headings as listed below. The abbreviation is sometimes used (depending on the client) rather than the full formal heading. In the reports in this Volume, when an abbreviation is used, we have attempted to define its meaning in parenthesis following the heading. Other headings, as you will see, are spelled out and are generally all in capital letters and may or may not be in bold-face type, or underlined, again depending on the preferences of the practice or the hospital.

HISTORY AND PHYSICAL:
A main heading only. Note that the history portion relates to the patient’s “subjective” account of his/her current condition or illness, whereas the physical portion focuses on the “objective” characteristics or findings of the patient’s condition or illness, usually by the physician.

DATE:
The date of the examination.

CC (Chief Complaint):
What the patient subjectively states is wrong.

HPI (History of Present Illness):
What the current disease process or injury is, as related to the chief complaint necessitating this particular workup.

PMH (Past Medical History):
What the patient’s problems or diagnoses have been in the past, both medical and surgical, and any pregnancy or gynecologic history, if significant, to this work-up.

FH (Family History):
The immediate family's medical problems and genetic predisposition to problems or diseases.

SH (Social History):
The patient's education, work, marital status, children; habits, such as smoking, drinking, drugs, and may even include hobbies and recreational activities.

ROS (Review of Systems):
The review of the systems of the body.

**MEDICATIONS:**
Any medications patient is currently using either prescribed or over the counter.

**ALLERGIES:**
Notable allergic reactions, particularly to medications and food products.

**PE (Physical Examination):**
Main heading. The **PE** is composed of the following four types of evaluation:
1. **visual** – what is seen
2. **auditory or aural** – what is heard
3. **olfactory** – what is sensed by the nose
4. **tactile** – what is felt. The examination should include:

- **GENERAL:** How the patient appears to the examiner.
- **VITAL SIGNS:** Temperature, pulse, respirations, blood pressure, height and weight.
- **SKIN:** Turgor, color, tone, scars, etc.
- **HEENT:** Head, eyes, ears, nose and throat.
- **NECK:** Pulses, thyroid.
- **CHEST:** Heart, (cardiac), lungs, breasts.
- **ABDOMEN:** Exam of palpable internal organs.
- **GENITALIA:** Male/female anatomy appearance.
- **RECTAL:** Tone, hemorrhoids.
- **EXTREMITIES:** Arms, hands, legs, feet.
- **NEUROLOGIC:** Neurologic testing, examination.

**LABORATORY DATA:** Any intercurrent labs, which have been obtained at either the office, by the referring physician, or the hospital outpatient/inpatient department.

**IMPRESSION:** Main heading. What the examiner thinks is wrong with the patient. Sometimes this appears as “problem” in a “problem-oriented” record, listing each problem numerically and discussing it in the order presented.

**PLAN:** Main heading. The further workup (diagnostic tests, x-rays) of the problem(s), what medication or surgery is anticipated, return visits required or anticipated, and referral to other providers.
CHIEF COMPLAINT:
The patient is a 63 year-old woman with a history of epilepsy and depression now admitted with a 31 lb weight loss and dehydration.

HISTORY OF PRESENT ILLNESS:
The patient has a history of epilepsy since resection of a meningioma in November 2008. She has had persistent right-sided weakness and vague pain in the upper extremities since that time. The patient was treated for pulmonary tuberculosis with INH (drug) and PAS (drug) in December of 1962. In July 1991 she required retreatment for active tuberculosis. In addition, the patient has been treated for an antral ulcer, a DVT in December 1990, dysentery in August 1995 and acute bronchitis in December of 1996. The patient had been treated for depression in the past, but was extremely noncompliant with follow-up, and has been off therapy since she was unwilling to follow-up with the psychiatrist. In October of 1996 she came to see me after a four-month hiatus complaining of weight loss and vague abdominal pain; she had lost 17 pounds at that time. An extensive workup was initiated including abdominal CT scan, which was negative, upper GI, which was negative, blood cultures x 2, which were negative, multiple serial chest x-rays all negative for relapse tuberculosis, and negative sputa for acid-fast bacilli. The patient was admitted in December 1996 with bronchitis secondary to Hemophilus influenza. Upper and lower endoscopies were scheduled on three occasions, and the patient failed to show for any of these tests.

Today the patient complains of constipation without abdominal pain and without fever, chills, or swollen lymph nodes. She has no other focal complaints.

PAST MEDICAL HISTORY:
Epilepsy, meningioma, pulmonary tuberculosis, antral gastric ulcer, history of deep venous thrombosis, depression.

FAMILY HISTORY:
The patient's mother died of metastatic cancer of the breast; her father died of unknown causes at the age of 74. She has two sisters, one with thyroid disease and the other in good health.

REVIEW OF SYSTEMS:
See History of Present Illness.

MEDICATIONS:
Dilantin 200 mg p.o. b.i.d., Tylenol p.r.n., Valproic 500 mg p.o. q.a.m. and 750 mg p.o. q.p.m.

ALLERGIES:
Tegretol.

**PHYSICAL EXAMINATION:**
   **GENERAL:** The patient is tired-appearing.
   **VITAL SIGNS:** Temperature 98.6, pulse 84, respirations 20, blood pressure 90/50.
   **SKIN:** Normal.
   **HEENT:** Anicteric. Normal oral mucosa. No cervical lymphadenopathy.
   **NECK:** Supple.
   **LUNGS:** Clear.
   **CARDIAC:** No murmur.
   **ABDOMEN:** Scaphoid. No hepatosplenomegaly or dominant masses.
   **RECTAL:** Guaiac negative. No masses palpated.
   **EXTREMITIES:** No edema.
   **NEUROLOGIC:** Nonfocal.

**ADMISSION LABORATORY DATA:**
Glucose 89, BUN 7, creatinine 0.7, sodium 146, potassium 4.7, chloride 113, CO2 26, calcium 9.1, albumin 3.5, total protein 6.6, SGOT 16, alk phos 85, bilirubin 0.5, LDH 135, cholesterol 161, triglyceride 162. White count 6.9, hematocrit 37.4, platelets 246. Urinalysis: 5 red cells, 9 white cells, 2 epithelial cells. Chest x-ray: No change in chronic scarring.

**ASSESSMENT/PLAN:**

1. **Weight loss:** The patient has a substantial weight loss over the last eight months with a negative workup to date including abdominal CT, upper GI series, blood cultures, and acid-fast smear. She has been extremely noncompliant with outpatient workup and appears to be somewhat dehydrated today. We will admit her to the hospital for IV hydration and will obtain the following tests:
   a) Upper and lower endoscopy.
   b) Abdominal and pelvic CT scan.
   c) Screening mammography.

   In addition, I will consult Dr. Akin Frame for medical treatment of her severe depression. I suspect that depression may play a role in her weight loss.

2. **Seizure disorder:** We will continue the patient’s epilepsy medications.

3. **Code status:** The patient is a full code.
A-1 / Questions

1. List the headings of the categories in the document.

2. What was wrong with the patient?

3. What medical problems and surgery had she had in the past? Look the words up so you know what they mean.

4. What do you think INH and PAS are? Note they may be listed in the Abbreviations List of Volume I.

5. What tests had the patient had in the past? Look them up in the References in Medical Terminology I or your dictionary if you do not know what they are.

6. What were the family's problems?

7. List the categories in the physical examination (in the answer section, read carefully).

8. Dissect (in the physical exam) hepatosplenomegaly's components by each part of the compound root, combining letter, and suffix, and write the meaning.

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</table>

9. On the rectal exam, the guaiac (pronounced gwy-ack) was negative. Look up that word and explain what it means.

10. Look at the admission laboratory data. Referring to the Laboratory Section from Medical Terminology I note the correct answer for where the first 15 (a through o) test values were obtained.
11. What was noted on the chest x-ray?

12. Under the assessment and plan, what are the following?

<table>
<thead>
<tr>
<th>Lab Data</th>
<th>Obtained From</th>
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<tbody>
<tr>
<td>a. glucose</td>
<td>f. chloride</td>
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<tr>
<td>b. BUN</td>
<td>g. CO₂</td>
</tr>
<tr>
<td>c. creatinine</td>
<td>h. calcium</td>
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<tr>
<td>d. sodium</td>
<td>i. albumin</td>
</tr>
<tr>
<td>e. potassium</td>
<td>j. total protein</td>
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<tr>
<td>k. SGOT</td>
<td>l. alk pos</td>
</tr>
<tr>
<td>m. bilirubin</td>
<td>n. LDH</td>
</tr>
<tr>
<td>o. cholesterol</td>
<td></td>
</tr>
</tbody>
</table>

A-1 / Answers

1. chief complaint, history of present illness, past medical history, family history, review of systems, medications, allergies, physical examination, admission laboratory data, assessment and plan
2. she was seen for weight loss and dehydration primarily; she said she had constipation without pain
3. epilepsy, resection of meningioma (tumor of the meninges), persistent right-sided weakness and vague pain, pulmonary tuberculosis, active tuberculosis, antral (gastric) ulcer, DVT (deep vein thrombosis), dysentery (frequent, watery stools), bronchitis, depression, weight loss, and vague abdominal pain
4. drugs; medication to treat pulmonary tuberculosis
5. abdominal CT scan (computed tomography), chest x-rays, sputum (products from lung) tests, endoscopies were scheduled but not done
6. metastatic (spreading from one part of the body to another) cancer, thyroid disease
7. general; vital signs (includes temperature, pulse, blood pressure, respirations), skin; HEENT, which is an abbreviation for head, eyes, ears, nose and throat; neck, lungs (or chest), cardiac, abdomen, rectal, extremities, neurologic
8. (a) hepat = liver, (b) o = combining vowel, (c) splen = spleen, (d) o = combining vowel, (e) megaly = enlargement - “enlargement of the liver and spleen”
9. guaiac is a test which looks for “occult” blood, almost always rectally

10. 

<table>
<thead>
<tr>
<th>a. glucose: urine/blood</th>
<th>f. chloride: blood</th>
<th>k. SGOT: blood</th>
</tr>
</thead>
<tbody>
<tr>
<td>b. BUN: blood</td>
<td>g. CO₂: blood</td>
<td>l. alk phos: blood</td>
</tr>
<tr>
<td>c. creatinine: blood</td>
<td>h. calcium: blood</td>
<td>m. bilirubin: blood</td>
</tr>
<tr>
<td>d. sodium: blood</td>
<td>i. albumin: urine/blood</td>
<td></td>
</tr>
<tr>
<td>e. potassium: blood</td>
<td>j. total protein: urine/blood</td>
<td></td>
</tr>
</tbody>
</table>

11. Chronic scarring.

12. 

(a) Abdominal CT is a scan (radiological) of the abdomen.
(b) Upper GI series is an x-ray of the stomach and esophagus.
(c) Blood cultures are drawn to see if the blood grows any organism (bacteria).
(d) Acid fast smear - certain organisms resist coloring with an acid solution, particularly tubercle bacillus that causes tuberculosis.
(e) IV hydration is the process of restoring the body's water and chemical balance with an intravenous needle and infusion of solution.

Note the score of your exercise.

B. CHART NOTES

SOAP RECORD/NOTE
Here's the scenario. The patient, Jane Doe, A-1 history-physical, was admitted to the hospital, received treatment and has now returned to the doctor's office for follow-up, generally made as a return appointment at the time of the first visit, and roughly near the time the care provider dictated the history-physical.

The chart note usually follows a very simple pattern of:

- **Subjective** (what the patient thinks) = S
- **Objective** (what the doctor thinks) = O
- **Assessment** (what the diagnosis is) = A
- **Plan** (what happens next) = P

Not all providers dictate the “SOAP” note format; sometimes they simply state in a narrative way the same information. In that case, you would just leave out the abbreviated headings or, if the client prefers, the headings, **Subjective, Objective, Assessment and Plan** information may be defined (with some practice) so that the transcriptionist organizes the appropriate data under the headings where it belongs.
NOTE: chart notes are far more liberal as to rules than the other types of reports. The idea is to conserve space.

SNOCAMP: migrated clinical SOAP record

What is SNOCAMP?

SNOCAMP is a new adaptation of a medical records format that includes the same four elements of the SOAP record (SUBJECTIVE, OBJECTIVE, ASSESSMENT, PLAN). It is designed to add enough information to allow better coding of the E/M (Evaluation and Management) CPT codes. It has accordingly added:

1. **Nature of Illness** (high/medium/low severity)
2. **Counseling**
3. **Medical Decision Making** (high/medium/low severity)

<table>
<thead>
<tr>
<th>FROM:</th>
<th>TO:</th>
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<tbody>
<tr>
<td>Subjective</td>
<td>Subjective</td>
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<tr>
<td><strong>NEW</strong></td>
<td><strong>Nature of Illness</strong> (high/medium/low severity)</td>
</tr>
<tr>
<td>Objective</td>
<td>Objective</td>
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<tr>
<td><strong>NEW</strong></td>
<td>Counseling</td>
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<tr>
<td>Assessment</td>
<td>Assessment</td>
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<tr>
<td><strong>NEW</strong></td>
<td><strong>Medical Decision Making</strong> (high/medium/low severity)</td>
</tr>
<tr>
<td>Plan</td>
<td>Plan</td>
</tr>
</tbody>
</table>

The advent of third-party audits, malpractice attorney subpoenas, medical guidelines and reimbursement code criteria all require comprehensive, readable documentation. This new SNOCAMP accomplishes that effectively. Integrating it into the record-keeping together with proper physician training, a coding compliance plan, and a trained coding and medical transcription staff, will ensure better documentation, better medicine and a better chance of passing a documentation audit.

SNOCAMP was developed in 1992, by Walter I. Larimore, MD. This format assists in assigning the correct Evaluation and Management (E & M) code.

The categories are defined as follows:

**Subjective:** Chief Complaint, History of Present Illness, System Review, Past Medical History, Social History, and Family History.
**Nature of Presenting Problem:** Describes the complexity or severity of the patient’s chief complaint, a disease, condition illness, injury symptom, sign, finding or other reason for the encounter.

**Objective:** Review of Systems (denies loss of weight, headaches, chest pain, etc.)

**Counseling:** Think of PAR, Procedures, Alternatives and Risks; list start and end times, detail the nature of the counseling or coordination of activities.

**Assessment:** What is the diagnosis or differential diagnosis? What are the potential complications?

**Medical Decision Making**
1. Number of Diagnoses or Management Options
2. Amount and/or complexity of Data to be reviewed
3. Risk of Complications and/or morbidity or mortality
4. Complexity of Decision-Making

This must be based on the information documented in the counseling, assessment and plan components of the medical record.

**Plan:** Treatment options should include rationale for any changes in treatment or tests ordered.

**SNOCCAMP example:**

<table>
<thead>
<tr>
<th>S</th>
<th>Patient complains of sneezing itchy/watery eyes</th>
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<tbody>
<tr>
<td>N</td>
<td>Low Severity</td>
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<tr>
<td>O</td>
<td>HEENT: Bilateral conjunctival cobble-stoning with minimal erythema and no discharge. PERRL, EOMs intact. Nasal turbinates boggy. Pharynx and ears normal.</td>
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<tr>
<td>C</td>
<td>Discussed diagnostic impression, risks, benefits, and options with patient.</td>
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</table>
| A      | 1. Allergic rhinitis  
      | 2. Allergic conjunctivitis                       |
| M      | Take over-the-counter antihistamine, drink plenty of fluids (straightforward |
| P      | 1. Pleth-10 ophthalmic solution, 2 drops OU q.i.d. x 5 days  
      | 2. Claritin - Claritin-D, 1 po b.i.d. p.r.n. (#30 no refill, but may call for refill of #30 p.r.n.)  
      | 3. Follow-up p.r.n.                              |

In both the history-physical and in the chart note, when instructions for medications are given, the following table lists the abbreviations and its meanings:

**Table 5.** Also see Abbreviations Listing in Medical Terminology I
We have presented the basic elements of the types of common medical reports prevalent in medical practice and related rules for consistency. With each set of reports you will see how the formats look and hear and see the terminology involved. Formats vary according to client preference, but headings are standard.

This set of reports has a voice file or CD associated.

- If you were provided a CD file, it is now time to insert it and prepare to listen.
- You will require a foot pedal in order to start and stop the dictation. Please listen and read the written report. Then listen and transcribe the report, but do not look at the course report until you complete the report you are working on. When you are finished with a report, compare yours to the written version, carefully noting any errors. Fix the errors you made (it reinforces the memory). Then go on to the next one. Save them if you wish for later review or reference.

You will listen and read each report before you answer the questions. You will of course review each report carefully, word for word, to assist you in answering the questions.

### B-1 / Chart Notes

**DOE, Jane**

**CN:** 13762

**S:** Ms. Doe feels better but not 100%.

**O:** Improved in the hospital, no epileptic episodes, and the depression responded well to medication. Dr. Frame prescribed Prozac. Her electrolytes improved with the IV hydration, and her weight, after an initial additional 2 lb, stabilized well. The scan showed some stones in the gallbladder; the upper GI was negative. Blood cultures were normal. I think she had a touch of gastroenteritis, probably viral.

**A:** She continues to progress well; we will need to watch for any gallbladder symptomatology and perhaps consult with a surgeon about a cholecystectomy.

**P:** She will continue her meds of Dilantin 200 mg p.o., b.i.d., Tylenol p.r.n., Valproic 500 mg p.o. q.a.m. and 750 mg p.o. q.p.m. I refilled her PX for Valproic. She will be followed by both me and Dr. Frame.
Here is another way the preceding chart note might be done if chart space is a consideration. (Only one line less, but clients sometimes request shorter formats to restrict chart size). In this sample, the paragraph is wrapped to the margin on the left, rather than indented.

DOE, Jane                  CN: 13762
S:  Ms. Doe feels better but not 100%.
O:  Improved in the hospital, no epileptic episodes, and the depression responded well to medication. Dr. Frame prescribed Prozac. Her electrolytes improved with the IV hydration, and her weight, after an initial additional 2 lb, stabilized well. The scan showed some stones in the gallbladder; the upper GI was negative. Blood cultures were normal. I think she had a touch of gastroenteritis, probably viral.
A:  She continues to progress well; we will need to watch for any gallbladder symptomatology and perhaps consult with a surgeon about a cholecystectomy.
P:  She will continue her meds of Dilantin 200 mg p.o., b.i.d., Tylenol p.r.n., Valproic 500 mg p.o. q.a.m. and 750 mg p.o. q.p.m. I refilled her PX for Valproic. She will be followed by both me and Dr. Frame.

Note: "CN" here stands for "Chart Number." Also, should the care provider neglect to give the headings during a narration, as you can see, the information is fairly self-explanatory with respect to the heading under which it belongs.

### B-1 / Questions

1. The CT scan showed stones where?

2. If **lithos** means stones, and **-iasis** means condition of, a word can be made combining the two - what is it? __

3. The medical word for **gallbladder** has its root in “chole.” Add “cyst” to that, then write the word for **removal** of the gallbladder.

4. The medical word for “condition of” having stones is “lithiasis.” Make a word using chole + lithiasis.

5. Make a word showing **inflammation** of the gallbladder, keeping in mind that “-itis" is the suffix describing inflammation.

6. While we are on "chole," do you think cholesterol is linked to that root word? Look it up and answer Yes or No?. What does it mean?

7. Answer the following:
8. Why would a chart number be important on this note?

9. What is the status of the patient’s epilepsy?

B-1 / Answers
1. gallbladder
2. lithiasis (condition of stones)
3. cholecystectomy – (-ectomy, removal of)
4. cholelithiasis
5. cholecystitis
6. yes – a pearly fat-like steroid alcohol – animal fat
7. (a) twice a day
   (b) as needed
   (c) every morning and evening
   (d) yes
8. in order to quickly locate the chart and insert the note
9. no epileptic episodes

B-2 / Chart Notes
PI: Patient received definitive radiotherapy for stage D1 carcinoma of the prostate. He has also had bony failure. He received palliative radiotherapy (could be heard as pallioradiotherapy too) to the right humeral head and the fifth lumbar vertebra. The patient is seen for follow-up today.

PE: Today shows the patient to have no pain to palpation in the spine. There is minimal tenderness at the right and left humeral heads.

IMPRESSION: Patient with new pain involving the thoracic spine. No symptoms of cord compression.

PLAN: The patient is to have a bone scan.

B-2 / Questions

1. What is radiotherapy?

2. Look up radiotherapy in your dictionary and list five other words where “radio-“ is the root word/prefix:
3. What is the root word for humeral?

4. Where is the humeral head?

5. What do these abbreviated headings stand for?

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<td>b</td>
<td>PE</td>
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</tbody>
</table>

6. To where do you think the patient’s cancer has spread?

**B-2 / Answers**

1. radiation therapy
2. just any five - lots of them are in there; you get the picture
3. humerus
4. arm
5. (a) present illness
   (b) physical examination
6. bone

**B-3 / Chart Notes**

**HISTORY:** The patient was diagnosed as having stage IIIEB Hodgkin’s disease. She received chemo and then radiotherapy. Her radiotherapy included mantle radio. This was concluded in April. She states she is doing quite well. Recent CT shows no change in the mediastinal mass, which is felt to represent fibrosis in the left lower lobe, and atelectasis with the pulmonary nodules.

**PE:** Today shows no cervical, supraclavicular, axillary, epitrochlear, inguinal or popliteal adenopathy. The lungs are clear and abdominal exam unremarkable.

**IMPRESSION:** Clinically doing well.

**B-3 / Questions**
1. Hodgkin’s is a disease of what?

2. Most cancers/tumors are staged or identified by numbers and alpha (+/-) letter sequences. Can you spot the staging of this Hodgkin’s?

3. In addition to radiotherapy, this patient had chemotherapy. What does the combination of these two roots mean?

4. The exam mainly focused on enlargement of lymphs (adenopathy - add-in-ah-puty); areas searched were:

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a |   |
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c |   |
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e |   |
f |   |
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5. Left lower lobe of the ________.

6. Where is the mediastinal mass?

**B-3 / Answers**

1. lymph system (did you check “diseases” in the dictionary first?)
2. II-E-B
3. chemical therapy (drugs which destroy tumor cells [and normal cells too])
4. (a) cervical (neck)
   (b) supraclavicular (over the clavicles)
   (c) axillary (under the arms)
   (d) epitrochlear (eppi-troke -lee-urh) - (in the arm)
   (e) inguinal (een -gwin-ull) - (the inner thigh area)
   (f) the popliteal (pop-li-tee uhl) - (behind the knee)
5. lung
6. lung
B-4 / Chart Note – Catheterization Angiogram

PRECATh DIAGNOSIS: Crescendo, recurrent angina.

PAtient profile: The patient is a 58-year-old with known arteriosclerotic coronary artery disease. The last angiocath was in April during which he was found to have an ejection fraction of approximately 80%, coronary artery obstructions of 60% diagonal, irregular LAD (left anterior descending) and 30% in left circumflex. Echo showed trivial MR (mitral regurgitation). In November he had a normal treadmill. Patient presented to the ER the day of admission complaining of his usual anginal chest pain. Described as a sharp chest pain without radiation or shortness of breath, nausea or vomiting. He took 4 sublingual nitroglycerins at home with a decrease in the pain to 5/10. He then came to the ER. Pain has increased with exertion. He reported no associated symptoms. In the ER, pain was treated with additional sublingual nitroglycerin as well as IV morphine with complete pain resolution after about 20 minutes.

EKG: Was remarkable for the presence of a pseudoacute inferior MI pattern with ST elevations anteriorly and laterally which appear unchanged from prior EKGs. Maximal CPKs in the patient were 199.

PRECATh IMPRESSION:
1. Atherosclerotic heart disease manifest by
   a. Prior MI
   b. Unstable angina
   c. Prolonged chest pain

CATH LAB SEQUENCE: Right femoral venotomy, right femoral arteriotomy, right and left coronary cineangiography. The patient was taken to the cath lab where the femoral vein on the right was catheterized with a French hemostatic sheath. Using the modified percutaneous Seldinger technique, the right femoral artery was catheterized with a #8 French sheath and 2000 units of heparin were administered IV. An 8 French Judkins left cardiac catheter #4 was inserted through and advanced into the right femoral artery. Utilizing hand held injections of 1-6 mL of Isovue-370, a total of six selective left coronary cineangiograms were obtained in multiple degrees of obliquity. The catheter was then exchanged for a #8 French coronary catheter and two selective views were obtained. Catheters were removed but hemostatic sheaths were left in place.

Angiography was of good technical quality and suitable for interpretation. The left main coronary artery appears angiographically normal. It bifurcates normally into the LAD and left circumflex coronary artery. LAD is a type II vessel that is diffusely irregular in its midportion. There is an approximate 50 to 70% distal LAD obstruction. There is a subtotal obstruction of a small very proximal first diagonal branch. Subsequent diagonals have minor irregularities without hemodynamic significance. The left circumflex is a large dominant artery with multiple moderate-sized obtuse marginal branches. It remains a large caliber vessel through its course in the AV groove, giving off a fairly large distal OM as well as a large caliber PDA (posterior
descending artery). There are minor irregularities in the left circumflex arteries. These do not appear to be of hemodynamic significance. The right coronary artery is very small, nondominant, and has two left ventricular branches prior to the origin of the acute marginal branch. The right system has irregularities but appears unobstructed.

FINAL DIAGNOSIS:
1. Artherosclerotic heart disease manifested by
   a. Unstable angina pectoris, normal CPKs with elevated MV fraction
   b. Single vessel coronary artery disease

DISCUSSION: The patient presents for evaluation of unstable angina in association with a prolonged episode of chest pain and elevated MV fraction. Diagnostic cardiac catheterization demonstrates irregularities throughout the coronary arteries but hemodynamically significant disease only in the LAD, first diagonal system. PTCA of the first diagonal is recommended.

B-4 / Questions

1. Patient has ____________________ coronary artery disease.

2. On the April cath, there was obstruction of four arteries. They are:
   a
   b
   c
   d

3. He was given nitroglycerin sublingually. What does that mean?

4. His EKG showed a MI. What does MI stand for?

5. What are CPKs?

6. In the heart catheterization process, the venotomy (“puncture of the vein”) was made in which vein?

7. The findings showed the left main coronary artery to appear __________________, and it bifurcated into the ____________________, and the ________________________.

8. How much obstruction of the LAD was noted?

9. A branch off the LAD called the ____________________ had some obstruction as well.
10. Why didn’t s/he say FDB for first diagonal branch (like LAD)?
11. A large dominant artery was the ________________________________.
12. The right coronary artery had two ______________________ branches.
13. Significant disease was found only in the __________________________.
14. Is this the first angio the patient has had?
15. Was the patient’s treadmill normal?
16. Was the EKG normal?
17. What does EKG stand for?

B-4 / Answers

1. arteriosclerotic (arr-tear’-eeo-sklur-odd’ick) or atherosclerotic coronary vascular disease
   (ASVD or ASCVD)
2.  
   (a) coronary
   (b) diagonal
   (c) left anterior descending
   (d) left circumflex
3. sub = under, lingual = tongue → “under the tongue”
4. myocardial infarction (see Volume I, Abbreviation List)
5. creatinine phosphokinase (see Volume I, Lab Section)
6. right femoral
7. normal, LAD (left anterior descending), left circumflex coronary artery
8. 50 to 70%
9. first diagonal branch
10. nobody knows - that’s why we put the warning on abbreviations (see Medical Terminology I)
11. left circumflex
12. left ventricular branches
13. LAD (left anterior descending)
14. no
15. yes
16. was remarkable for an old MI pattern with ST elevations, assume it is abnormal
17. electrocardiogram
B-5 / Chart Notes

ID: 76-year-old male with stage TI-B well-differentiated adenocarcinoma of the prostate.

PROPOSED TREATMENT: 76-year-old male with prostatic carcinoma with risk factors of age and ASCVD (atherosclerotic coronary vascular disease) with a history of two myocardial infarctions. Given the fact that this patient does have adenocarcinoma and is 76, one could opt for observation or hormonal treatments. He does, however, have a history of recurrent obstructions. If the cancer were to recur, it would cause further problems. The various risks associated with radiation therapy including acute and late-term damage to the bowel and bladder were explained to the patient to his satisfaction, and he has agreed to proceed with treatment. We will treat with a 6600 Centigray in fractions of 180 Centigray.

HISTORY: This male has a long-standing history of bladder outlet obstructive symptoms having had TURP x2. Over the last 6 to 9 months, he has had recurrent obstructive voiding problems, nocturia x4-5 per night, double voiding, hesitancy and decrease in peak flow. He underwent the third TURP a month ago, which revealed 9 of 66 chips positive for adenocarcinoma. A CAT scan of the abdomen and pelvis performed revealed the previous TURP defects and one concentric calcified lymph node, which had been noted on a previous CAT scan. He also had a bone scan which revealed increased activity in L3 but plain films showed changes consistent only with DJD. All of the tests were performed in April. A PSA from 3 November is 0.7. The highest PSA has been 0.9. He had an alkaline phosphatase, which was normal. Transrectal ultrasound-guided biopsy of all four quadrants was negative for tumor.

MEDICATIONS: Glucotrol, cardizem and aspirin.

PHYSICAL EXAMINATION: Pleasant, healthy-appearing elderly male in no acute distress. There is no bony tenderness to percussion exam. Lungs are clear to auscultation bilaterally. Heart exam reveals a slightly irregular rate and rhythm with a I/VI early systolic ejection murmur. There was no supraclavicular adenopathy. Abdominal exam was unremarkable. The exam of the prostate reveals smooth, soft lobes with the noted TURP defect.

PLAN: Schedule the radiation treatments.

B-5 /Questions

1. The patient has ASCVD. What does that stand for?
2. What is the abbreviation for myocardial infarction?
3. What does TURP stand for?
4. On a recent CAT (computerized axial tomography) scan, he was noted to have a concentric __________________________

5. Why would he have undergone a bone scan? ________________________________

6. He also had a transrectal __________________________ biopsy of all four quadrants (of the prostate).

7. His medications were: ________________________________________________

8. On exam he had a __________________________ early systolic ejection murmur.

9. Did he have any lymph nodes palpable on the exam? Describe how this was stated.

10. The prostatic exam showed the TURP defect. What would that defect have been?

11. Examining the Anatomy Section in Medical Terminology I, why would the bladder outlet obstructive symptoms have occurred?

12. His tumor was staged as: ________________

**B-5 / Answers**

1. ASCVD = arteriosclerotic coronary vascular disease
2. MI = myocardial infarction
3. TURP = transurethral prostatic resection
4. calcified lymph node
5. looking for metastatic spread of his cancer
6. ultrasound-guided
7. glucotrol, cardizem and aspirin
8. I/VI
9. No – “there was no supraclavicular adenopathy”
10. prostate had been removed (TURP) X2
11. because of the relationship of the prostate to the bladder/urinary system (compression of enlargement on adjacent organs)
12. T1-B

**B-6 / Chart Notes**

S: Patient was watching TV, felt his neck and found a mass in the supraclavicular fossa.

O: Pleasant healthy-appearing young white male. Exam of the neck reveals a 1 cm lymph node in the right supraclavicular fossa. There is a very soft 2 cm mass in the low lymph node chain. In the supraclavicular fossa is a 3 cm lymph node mass and a possible 0.5 cm lymph
node in the left axilla, although this may represent vasculature. No adenopathy is appreciated in the right axilla. There is no epitrochlear or inguinal adenopathy. Lungs are clear to auscultation. Heart reveals a regular rate and rhythm without murmurs. Abdominal exam is unremarkable.

A: Lymph node mass, rule out Hodgkin’s disease.

P: Outpatient biopsy.

B-6 / Questions

1. Where is the supraclavicular fossa?
2. The second node was noted in the axilla. Where is that?
3. What was recommended in the Plan?
4. What is the epitrochlear area?

B-6 / Answers

1. the area just below the neck where the clavicles are
2. under the arms
3. outpatient biopsy (removal of a small amount of tissue for microscopic examination)
4. the inner condyle (smooth, rounded protuberance of a joint) of the humerus

B-7 / Chart Notes

DIAGNOSIS: Stage III T2, N1, M2 carcinoma of the left breast, status post-modified radical mastectomy and four cycles of chemotherapy.

PROPOSED TREATMENT: This is a 42-year-old woman who underwent modified radical mastectomy for an infiltrating ductal carcinoma of the left breast. The lesion was 3 cm in size and one lymph node was involved. CT scan showed numerous pulmonary nodules. The patient received four cycles of chemotherapy. The vast majority of the nodules have resolved. The plan is for the patient to receive postoperative radiotherapy if the involved lymph node shows extracapsular extension or other poor prognostic features. The risks and benefits of the radiation therapy to include soft tissue, lung and cardiac toxicity were explained to the patient and her husband.
**PAST MEDICAL HISTORY:** The patient has no other major medical problems. She has a history of cesarean section and has been on estrogen replacement therapy.

**GYN:** Menarche at age 13. Menopause recently while on the chemo. Gravida 1, para 1. Patient used birth control pills for six months. She did not breast-feed.

**PHYSICAL EXAM:** Shows the patient to be healthy-appearing and in no distress. There is no supraclavicular adenopathy. Lungs are clear throughout. Right breast and axilla are negative. The left chest wall shows complete healing and no suspicious lesions. Left axilla is negative. No abdominal masses.

**RECOMMENDATIONS:** Are for the patient to undergo postoperative radiotherapy if the formal pathology report shows indications for this. Will advise patient when pathology report returns.

**B-7 / Questions**

1. Stage the carcinoma: ________________________
2. What surgery had she undergone?
3. What kind of carcinoma was described?
4. Which breast was involved?
5. What was the postoperative plan?
6. For chemotherapy how many treatments did the patient have?
7. Were nodules located anywhere else?
8. What do you think, based on the answer of #7, had occurred?
9. What were the further risks of radiation therapy?
10. What does PMH stand for?
11. What does GYN stand for?
12. What is menarche (men-are’-key)?
13. Her obstetrical history is G-1, P-1. What do those letters stand for and how many children had she had?
14. Did she have adenopathy? ________________. Describe that finding:

### B-7 / Answers

1. IIIT2, N1, M2
2. status post (means she is post or subsequent, following, after) modified radical mastectomy
3. infiltrating ductal
4. left
5. radiotherapy
6. four cycles
7. yes; pulmonary area
8. metastases to the lung (cancer had spread)
9. soft tissue, lung and cardiac toxicity
10. PMH = Past Medical History
11. GYN = Gynecology
12. menarche = onset of menstrual periods
13. gravida and parous (see abbreviations in Volume I) and one child
14. no; there is no supraclavicular adenopathy; right breast and axilla are negative

### B-8 / Chart Notes

**S:** Here to check up on pacemaker functioning, repeat CT scan and an EKG.


**A:** (1) sick sinus syndrome, status post pacemaker, (2) seizure disorder, (3) arteriosclerotic peripheral vascular disease.

**P:** Echocardiogram and CT scan of the head. Continue same meds.
B-8 / Questions

1. The patient has a pacemaker because of what problems (hint PMH)?
2. What are her medications?
3. What is JVD?
4. Were any bruits (brew’e’s; “a sound, usually abnormal, heard in auscultation”) found?
5. What does CV stand for?
6. Was anything significant found on the exam?
7. Was a pelvic exam performed? Yes or No?
8. What does CVA stand for?
9. What is the plan?

B-8 / Answers

1. sick sinus syndrome and arteriosclerotic peripheral vascular disease (both are related to the heart and its function)
2. Coumadin, Tegretol and Cardizem
3. JVD = jugular venous distention
4. no
5. CV = cardiovascular
6. no
7. no - it was deferred
8. CVA = costovertebral angle
9. echocardiogram, CT scan of the head and continue same medications

B-9 / Chart Notes – Emergency Room

EMERGENCY ROOM NOTE:
HPI: 13-year-old male riding his bike when he fell landing on his left thumb. He also scraped his right leg. He was not wearing a helmet. However, he denies hitting his head. He has no neck or back pain. Denies chest or abdominal pain. Complaining mostly of left thumb discomfort.

PE: He has a temperature of 98.4, pulse 80, respiratory rate 18, blood pressure 120/70. Neck is supple and nontender. Chest OK. Abdomen soft and nontender. Left elbow has full ROM (range
of motion) without discomfort. Left forearm is nontender. There is no deformity. Left wrist is nontender with full ROM. Left hand tender over the first metacarpal. Left thumb is tender proximally. There is a small abrasion over the IP joint of the left thumb.

X-rays show an oblique fracture of the first metacarpus which is nondisplaced.

**IMPRESSION:** Closed fracture first left metacarpus and abrasions.

**PLAN:** Placed in thumb spica splint. To elevate the extremity and apply ice. Given Tylenol for pain. To follow-up in 4 days.

---

**B-9 / Questions**

1. What does HPI stand for?
2. He scraped his right leg; how is this described in Impression?
3. Left elbow had full ROM. What is that?
4. What was his major problem?
5. What does IP stand for?
6. What kind of fracture was found?
7. What does nondisplaced mean?
8. How was he treated?

---

**B-9 / Answers**

1. HPI = History of Present Illness
2. abrasions
3. ROM = range of motion
4. pain in the left thumb
5. IP = interphalangeal
6. oblique of the first metacarpus (note this changes to metacarpal when used as an adjective describing a fracture, e.g., metacarpal fracture) which was not displaced
7. nondisplaced = it wasn’t out of position
8. thumb spica (spike’ah) splint
EMERGENCY ROOM NOTE

HPI: A 38-year-old female walking down some stairs when she slipped, twisting her back. She states that as she fell she hit her left flank area. She did not hit her head, had no LOC. She denies neck pain, chest or abdominal pain. Denies numbness, tingling or weakness, and has no other complaints. She has a PMH (past medical history) of back injuries and previous muscle strains.

PE: On exam, she is alert, has a temperature of 99.4, pulse 76, respiratory rate 16, blood pressure 128/80. Neck is supple and nontender. Back is nontender along the spinal column. She does have some left lateral lumbar tenderness and left flank pain. She has full ROM of the hips without discomfort. Negative SLR (straight leg raise). Neuro exam: Motor tone is good, power is 5/5, and symmetric, reflexes 2+ and symmetric, cranial nerves II-XII are intact.

IMPRESSION: Lumbar strain and contusion.

PLAN: Bedrest. Given Percocet for pain. To apply moist heat to her back and to follow-up in two weeks.

B-10 /Questions

1. She had no LOC. What is that?
2. Describe her vital signs.
3. Where was the tenderness located?
4. Straight leg raises were: ____________________.
5. Describe the neurologic exam.
6. What was the Rx?

B-10 /Answers

1. LOC = loss of consciousness
2. temperature 99.4, pulse 76, respirations 16, blood pressure 128/80
3. lateral lumbar (low left back) and left flank pain
4. negative
5. motor tone good, power 5/5 and symmetric, reflexes 2+ and symmetric, cranial nerves II-XII intact
6. Rx (or prescription) was for Percocet
EMERGENCY ROOM NOTE:

HPI: This is a 2-year-old male brought to the ER because of cough. The sister has a history of recent pneumonia and has been treated with Ceclor. He has had a cough, fever, and vomiting for the last three days and also some slight diarrhea. His only medication is Tylenol.

PE: On exam, he has a temperature of 99.4, pulse 112, respirations 28, blood pressure 80/palpable. His TMs are clear and mobile bilaterally. Throat is nonerythematous. Neck is supple without adenopathy. Chest is clear to auscultation. Breath sounds are equal bilaterally. Abdomen is soft and nontender.

IMPRESSION: Bronchitic-type cough, probable upper respiratory tract infection with bronchitis. Will need to rule out pneumonia.

B-11 / Questions

1. This child’s main problems are: _________________________________.

2. If a heading of Family History was in this report, what would be included in that category from this report?

3. What are TMs?

4. If the breath sounds had been diminished on the right, what do you think that might mean?

5. Was pneumonia found?

6. So what was the only positive diagnosis?

B-11 / Answers

1. cough, fever, vomiting, slight diarrhea
2. sister with history of recent pneumonia
3. tympanic membranes, (ears)
4. right lung involved with a potential pneumonia
5. no, it was suspected and needs to be ruled out
6. bronchitis
C. X-RAYS (Standard, MRI, CT, CT-Guided, Ultrasound) and PATHOLOGY REPORTS

C-1

LEFT SHOULDER: Single portable view. Resection/removal of the distal aspect of the left acromion at the AC (acromioclavicular) joint has been performed as per the surgical history.

IMPRESSION: As above.

C-2

HISTORY: Hammertoe deformity [yes, the toe looks like a hammer]

AP AND LATERAL RIGHT FOOT: Articular osteophytosis and narrowing of the joint space of the first metatarsophalangeal joint (MPJ). Hammertoe deformities are present at the second and third PIP (proximal interphalangeal) joints. Early inferior calcaneal enthesophytes are seen at the origin of the plantar aponeurosis and insertion of the Achilles tendon.

IMPRESSION: As above.

C-3

HISTORY: Patellar laxity, status post surgery. (This is the knee area.)

Multiple small, round, calcific densities are present within the posterior femorotibial joint space consistent with synovial osteochondromatosis. A lytic lesion is present in the anterior medial aspect of the superior tibial metadiaphysis with mildly sclerotic borders. This does not appear to involve the cortex and may represent post surgical change versus a solitary bone cyst. The sclerotic border does not completely circle the lesion. Thus, it is difficult to exclude the presence of an aggressive tumor, though this is unlikely. The patellofemoral joint space demonstrates periarticular osteophytosis without significant narrowing and an effusion is present.

IMPRESSION:
1. Lytic lesion in the anteromedial aspect of the proximal tibial metadiaphysis, probably representing a solitary bone cyst. However, correlation with bone scan or MRI exam is advised given that the appearance of the lesion is not the one most typical for a solitary bone cyst and not one lending itself to the exclusion of a more aggressive lesion.
2. Synovial osteochondromatosis
3. Degenerative change of the patellofemoral (patellar femoral are the combined words – see how it works?) joint with effusion.
C-4

AP PELVIS: Views of the pelvis show a fixation screw within the left femoral neck and femoral epiphysis, treating the slipped capital femoral epiphysis. There is no evidence of slippage this time. Within the right hip no evidence of slippage on the AP (anterior posterior) or frogleg view.

IMPRESSION:
1. Fixation screw in the left hip as described.
2. No evidence of slippage on the right.

C-1 through C-4 / Questions

1. Report C-1 is an x-ray of the left shoulder. It is clearly an x-ray, which has been taken after a surgical procedure. What was done at surgery?

2. C-1 resection removal was of the distal part; what does distal mean?

3. In report C-2, this is an x-ray of the foot. What do the following mean?

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<td>a. osteo</td>
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<td>b. phytosis</td>
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4. In C-2, what does PIP stand for?

5. In C-2, what are enthesophytes?

6. C-3 is a postoperative film of what part of the body?

7. In C-3, “femorotibial” has what two roots? ____________________/__________________

8. In C-3, what is lytic?

9. C-4 notes an AP pelvis. What does AP stand for?

10. C-4 notes a “fixation screw.” What did the screw do?

C-1 through C-4 / Answers

1. a portion of acromion has been removed
2. toward the end of (in this case)
3. oste/o = bone and phyt = pathologic growth and -osis = condition
4. proximal interphalangeal
5. -phytes (see answer #3) at the insertion of muscle or tendon to bone (entheso)
6. knee
7. femur and tibia
8. lytic = affixing process
9. AP = anterior-posterior (front and back of body) see Volume I Directions
10. fix the femoral neck and epiphysis (which had slipped)

HISTORY: Status post transbronchial biopsy, rule out pneumothorax.

AP CHEST: Portable chest films taken in both inspiration and expiration show no cardiac abnormalities. No active pulmonic infiltrate is seen. It is difficult to say whether or not a right hilar mass is present without previous films for comparison. No pneumothorax or other abnormalities are identified.

IMPRESSION: 1. No pneumothorax.

SCOLIOSIS SERIES: Scoliosis with the thoracic dextroscoliotic component measuring 22 degrees and the lumbar levoscoliotic component measuring 37 degrees. Flattening and sclerosis is evident at the right femoral head with flattening of the acetabular angle suggestive of prior hip dislocation.

IMPRESSION: As above.

RIGHT FOOT: Weight-bearing views of the right foot show marked sclerosis, periarticular osteophytosis and joint space loss at the tibiotalar joint with what appears to be partial collapse of the talus. A large amount of soft tissue swelling is evident at the ankle and diffuse osteopenia is seen. There is buckling of the trabecular framework in the region of the calcaneal neck suggesting fracture. A bony fragment measuring approximately 15 mm is seen at the posterosuperior aspect of the calcaneus. No old films are available for comparison.

IMPRESSION: Possible fracture.
C-8

**LEFT SHOULDER:** Multiple views of the left shoulder show an inferiorly sloping acromion process. The acromiohumeral space measures 8 mm in neutral position and 3 mm in internal rotation. The articular surfaces at the glenohumeral joint space are normal.

**IMPRESSION:** Findings suggestive of impingement.

C-9

**RIGHT THUMB:** AP and lateral views of the right thumb show a small bony fragment seen dorsally at the first DIP (distal interphalangeal) joint overlying the proximal phalangeal head. A small amount of soft tissue swelling is seen here.

**IMPRESSION:** As above/fracture?

C-10

**C-SPINE:** Multiple views of the cervical spine show poor visualization of C7 on the flexion and extension views, and the neutral view of the lateral cervical spine was not obtained. No evidence of spondylolisthesis or instability is evident on flexion or extension. Narrowing of the C3-4 foramen on the right secondary to facet and vertebral joint hypertrophy. Otherwise, the C-spine is normal in appearance.

C-5 through C-10 / Questions

1. C-5 is a chest x-ray. If pulmonic infiltrates had been seen, the patient would have likely been diagnosed with: ________________________________

2. C-6 is a series done of the back determining the degree of curvature. If the curvature was flattened (which it was), in reading the rest of the report, what caused it?

3. In C-7, an x-ray of the right foot, what clue did the radiologist have that a fracture might be present?

4. C-8, a shoulder x-ray had findings suggestive of impingement. What does that mean?

5. In C-9, an x-ray of the thumb, what does DIP stand for?

6. In C-9, was a fracture found?
7. C-10 is an x-ray of the cervical spine. What do (a) and (b) mean?

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<td>extension</td>
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C-5 through c-10 / Answers

1. pneumonia
2. prior hip dislocation
3. a bony fragment and a partial collapse of the talus
4. encroach, trespass, push against -- so we know it is a pathological process
5. DIP = distal interphalangeal (check your abbreviations list in Volume I)
6. says “?” - not certain of a fracture
7. 
   (a) flexion = bending forward
   (b) extension = returning to normal position, standing up

C-11

RIGHT WRIST: Multiple views of the right wrist show a smooth soft tissue lump along the dorsal wrist, which appears more lucent than the rest of the soft tissues consistent with a ganglion cyst. Degenerative changes are noted in the lunocapitate joint space. Mild osteophytosis is present.

IMPRESSION: Ganglion cyst and degenerative changes.

C-12

MRI CERVICAL SPINE: T1 weighted sagittal images were performed through the C-spine. T1 weighted axial images were performed from the occiput to C3. STIR (Synchroton x-ray residual scanning) sagittal images were performed through the C-spine and a volume SPGR (3-D cartilage imaging) acquisition was performed through the craniocervical junction.

FINDINGS: The transverse atlantal ligament is lax. There appears to be a defect in its attachment on the left side of the atlas. The attachment to the base of the occiput appears intact, as does the attachment at the base. In the supine position, the craniocervical junction is in normal alignment. The cervical spinal cord shows normal signal and is not significantly compressed at any level.

IMPRESSION:
1. At least partial disruption of the transverse atlantal ligament at its attachment to the left
side of the atlas.
2. Mild subluxation of C7 on T1. If there is pain referable to this region, consider posterior ligamentous injury. No acute fracture injury.

C-13

CT NECK: Contiguous 5 mm axial images obtained from the skull base to the thoracic inlet.

FINDINGS: The thyroid is diffusely enlarged measuring 4 cm in AP dimension, 10 cm in transverse and 5 cm in superior to inferior dimension. Minimal deviation is noted of the trachea to the right. There is no adenopathy. The fossa of Rosenmueller, the torus tubarius, epiglottis and sinuses are normal in appearance. There are no soft tissue masses.

IMPRESSION:
1. Enlarged thyroid with minimal displacement of the trachea.
2. No tracheal compression.

C-14

MR LUMBOSACRAL SPINE: Sagittal T1 and fast spin echo, intermediate and T2 weighted images obtained, followed by axial fast spin.

FINDINGS: Mild disc dessication noted at the L2-3, L4-5 and L5-S1 levels. The marrow signal is normal. The conus is at the L1-2 level. Axial images of the L3-4 level demonstrate no evidence of disc bulge or herniation, no canal stenosis, and no neural foraminal (or combined = neuroforaminal) narrowing. There is facet hypertrophy bilaterally at the L4-5 levels without disc bulge or stenosis. There is no evidence of disc bulge, canal stenosis or neuroforaminal narrowing. A small synovial cyst may be present at the right L5-S1 level.

IMPRESSION:
1. Minimal degenerative disc disease with facet hypertrophy at L2-3.
2. No neural foraminal narrowing.

C-11 through C-14 / Questions

1. In C-11, what was the diagnosis?
2. In C-12, the x-ray is a MRI, which stands for?
3. In C-12, a lax ligament was found, which was a __________________________. Was a fracture found?
4. In C-13, CT is a shortened version of CAT, which stands for?

5. In C-13, the trachea was deviated to the ______________________, and on the final impression the thyroid was noted to be?

6. In C-14, facet hypertrophy was noted. What does hypertrophy mean?

C-11 through C-14 / Answers

1. ganglion cyst and degenerative changes
2. MRI = Magnetic Resonance Image
3. transverse atlantal ligament; no
4. CAT = computerized axial tomography
5. right; enlarged
6. hypertrophy = abnormal increase in the size of

C-15

MR BRAIN:

HISTORY: 35 year-old with increasing frequency and severity of headaches.
The brain was scanned in sagittal projection utilizing a T1 weighted sequence and in axial projection utilizing T1 proton density and T2 weighted sequences. No evidence of Chiari malformation or other structural abnormality is seen. The ventricles and sulci are normal in size and no mass effect is seen. Normal flow voids are seen within the major vessels and there are no areas of signal intensity within the brain. Incidental note is made of a mucous retention cyst or polyp in the left maxillary sinus.

C-16

MR HEAD:
Clinical history: 6 day-old with hypotonia and a head CT read as bilateral occipital subdural (could also be occipitosubdural) hematomas.

MR: Sagittal T1 weighted images obtained followed by axial variable echo images, coronal weighted images and coronal SPGR images.

FINDINGS: Area of increased attenuation on the CT is evaluated with and felt to be normal dural venous sinuses. There is no evidence of subdural hematoma. However, there is some overlapping of the sutures of the lambdoidal occipital (could be combined - lambdoido-occipital) regions bilaterally. Subdural space is observed, however, between the brain parenchyma and the overlying skull. The ventricles and sulci are normal in size. There are no abnormal CSF (cerebrospinal fluid) collections. The distribution of the grey matter is normal. The corpus callosum is normal in appearance.
IMPRESSION:
1. Some overlapping of the sutures in the lambdoidal occipital regions bilaterally.
2. No evidence of subdural hematoma.

C-17
MRI KNEE: Left knee scanned in the coronal projection utilizing a T1 weighted sequence and in sagittal projection utilizing proton density, T2, and gradient echo sequences.

FINDINGS: The cruciate ligaments and collateral ligaments are well seen and appear normal. There is no evidence of tear of the meniscus. No joint effusion is present or subchondral abnormalities are identified. The cartilage appears to be intact. The patella is normal in appearance in extension and 20 degrees of flexion with no evidence of cartilage thinning or abnormal position.

IMPRESSION: Normal MRI left knee.

C-18
MRI SHOULDER: Prep and technique as in previous reports.

FINDINGS: There is a partial tear of the supraspinatus tendon near its insertion. No discontinuity is seen in the tendon and no definite fluid is seen in the subacromial bursa. No muscular atrophy is noted. The acromion has a normal configuration with no hypertrophy at the acromioclavicular joint. The glenoid labrum appears intact and the biceps tendon is in normal position.

IMPRESSION:
1. At least partial tear of the supraspinatus tendon near the insertion.
2. No definite evidence of complete tear.

C-15 through C-18 / Questions
1. C-15 is an __________ of the brain. It was done because the patient had a history of: __________________________

2. In C-15, an incidental finding (since the whole head is viewed) was a _________________ in the _________________ sinus.

3. C-16 notes a newborn infant with a suspicion of hematoma. Were any found? Yes or No? Of note, the sutures of the bony part of the head (lambdoidal occipital are the words this combining form is made up of) had some: _________________

IMPRESSION:
1. At least partial tear of the supraspinatus tendon near the insertion.
2. No definite evidence of complete tear.
4. C-17 is a study, which scanned the knee. The cruciate (crew’she-uht) and collateral ligaments were not well seen. True or False?

5. On C-17, the meniscus (men-iss’cuss) was torn. True or False?

6. Extension was 20 degrees. True or False?

7. C-18 showed a tear of the _________ tendon near its _______________________.

8. Was fluid noted? Yes or No?

9. Acromion was hooked to clavicle making a word: ______________________.

10. Super and spinatus were combined to make a word: ______________________.

C-15 through C-18 / Answers

1. MRI; headaches
2. polyp; maxillary
3. no; overlapping (which is normal for a newborn)
4. False
5. False
6. False; flexion was 20 degrees
7. supraspinatus tendon / insertion
8. No
9. acromioclavicular (a-chrome ee-oh-cluv-ick u-lurh)
10. supraspinatus (spin-ah tuss)

C-19

BODY SCREENING:

CERVICAL SPINE: Views of the cervical spine demonstrate a normal C1-2 distance. A slight retrolisthesis of C3/C4 and a grade I spondylolisthesis of C5 and 6 are seen. Disc space narrowing is present with marginal osteophytic changes seen at the 3-4, 4-5, and 6-7 levels consistent with degenerative changes. Foramina appear patent except for some narrowing of the 4-5 neural foramina on the right from hypertrophy. Note is made of ossification of the ligamentum nuchae at the lower C-spine.

PELVIS AND HIPS: Views of the pelvis and hips reveal mild superior joint space narrowing, consistent with early osteoarthritis changes in the hips. Marginal osteophytes are seen at the acetabular margins. No fractures or focal lesions are identified.
**SHOULDER:** Views of the shoulder reveal no erosive changes or focal bone lesions. Some spurring superiorly is seen.

**KNEES:** Weight-bearing frontal views reveals well maintained joint spaces with no erosive changes.

**FEET:** Views of the feet demonstrate normal alignment and mineralization without evidence of erosive changes. Mild degenerative changes are seen at the MTP (metatarsophalangeal) joint of the left great toe, probably osteoarthritic.

**HANDS and WRISTS:** Reveal normal mineralization and alignment without evidence of erosive changes or joint space narrowing. Minimal osteoarthritis changes are seen at the carpometacarpal joints of the thumbs.

**IMPRESSION:**
1. No evidence of erosive disease.
2. Scattered osteoarthritic changes and degenerative disc changes of the C-spine as noted above.

**C-19 / Questions**

1. C-19 was a full body screen. This included x-rays of what?
   
   | a |   |
   | b |   |
   | c |   |
   | d |   |
   | e |   |
   | f |   |

2. On the same report, were any fractures noted? Yes or No? What pathology was found?

3. What does *retrolisthesis* mean?

4. Another word using “–listhesis” is in that report using a different root. What is it?

5. *Foramina* is the plural of what word?
6. If generative means to grow or generate, what does degenerative mean?

C-19 / Answers

1. (a) cervical spine  
   (b) pelvis and hips  
   (c) shoulder  
   (d) knees  
   (e) feet  
   (f) hands and wrists

2. no; osteoarthritic and degenerative changes

3. retro = backward or located behind; listhesis = forward displacement

4. spondylolisthesis (meaning spondyl; a combining form referring to the vertebra)

5. foramen

6. the opposite, not to grow or generate (“de” = taking away from)

C-20

CLINICAL HISTORY: Sinusitis

SINUS X-RAYS: Films demonstrate normal appearing ethmoid, maxillary and sphenoid sinuses. The inferior portions of the frontal sinuses appear abnormally dense and mucosal thickening is present in the dependent portions of the frontal sinuses.

IMPRESSION: Findings suggestive of frontal sinusitis.

C-21

CLINICAL HISTORY: 57 year-old female with metastatic breast cancer and pain in the back.

CHEST: Views of the ribs demonstrate some cortical irregularity and possible expansion of the posterior 6th rib that may represent either a fracture or metastatic disease. This has been reported as positive on a bone scan. The remainder of the ribs does not demonstrate any evidence of fracture or destructive lesions. Again noted are surgical changes in the hilum of the left lung. A mass cannot be ruled out. Noted also is an irregularity of the lower portion of a lower thoracic vertebral body unchanged since prior exam which may represent metastatic disease.

IMPRESSION:
1. Right 6th rib lesion as described above.
2. No other rib abnormalities seen.
C-22

HISTORY: Question of fibroid, uterus.

ULTRASOUND OF PELVIS: Examination of the uterus reveals several hypoechoic, small lesions in the fundus of the uterus. The largest measures 1.6 cm in width. These would be most consistent with uterine fibroids. The endometrial stripe appears within normal limits. The left ovary measures 2.0 cm in length and the right 2.0 cm. No evidence of free fluid is demonstrated in the cul de sac.

IMPRESSION:
1. Multiple hypoechoic areas in the region of the fundus of the uterus consistent with fibroids.
2. The uterus is enlarged.

C-23

SELECTIVE ANGIOGRAPHY: A selective angiogram was performed of the superior mesenteric artery and the films are returned for interpretation. The upper portion of the SMA (superior mesenteric artery) is identified in the region of the splenic quadrant of the abdomen. No GI bleeding or abnormal vascularity was noted. The portal vein to the liver is patent.

IMPRESSION: Negative selective angio for bleed.

C-24

CT SCAN CHEST: Routine CT scan of the chest is performed showing what appears to be a small 1 cm lymph node between the left common carotid artery and left subclavian artery which is probably not pathologic. No other mediastinal adenopathy is identified. The pleural surfaces and lung parenchyma are unremarkable for nodularity. The liver is also unremarkable.

C-25

CT SCAN NECK AND CHEST: Multiple sequences of the neck and chest are obtained showing several large masses in the right neck in the parapharyngeal and paratracheal space, the largest approximately 4 cm in diameter. These masses are on both sides of the neck and extend into the superior mediastinum with somewhat bulky adenopathy in this area. The large mass extends into the superior mediastinum as well. These masses are moderately homogeneous with increased signal consistent with tumor.

IMPRESSION: Extensive masses in the low neck and superior mediastinum bilaterally, right greater than left. Malignancy is highly suspected.
C-26

HISTORY: Pain in the fingers.

RIGHT FINGERS: Two views were obtained showing a soft tissue mass at the radial aspect of the distal index finger at the distal IP (interphalangeal) joint with erosion of the distal phalanx suggestive of gouty tophus in that region.

C-20 through C-26 / Questions

1. C-20 is an x-ray of the sinuses and four are mentioned. They are:

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<td>d</td>
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</tr>
<tr>
<td>e</td>
<td>The diagnosis was:</td>
</tr>
<tr>
<td>f</td>
<td>What does –itis mean?</td>
</tr>
</tbody>
</table>

2. C-21 is a chest x-ray done on a woman with cancer primarily looking for: ___________________. Was this condition found? Yes or No?

3. C-22 is an ultrasound of the pelvis. Since ultrasound bounces sound around (that’s poetry), hypoechoic (root = echo) means what? And hyperechoic would mean what?

4. In C-22 what was the hypoechoic state caused by?

5. C-26 is an x-ray of the fingers. How many views were obtained? And, what is the abbreviation for distal interphalangeal?

6. C-23 is an angiogram procedure. This one selected the:

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<tbody>
<tr>
<td>a</td>
<td>__________________________ __________________________ (artery)</td>
</tr>
<tr>
<td>b</td>
<td>Why was the procedure done? (hint – impression)</td>
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7. In C-24, a CAT scan was done of the chest; a lymph node was found.

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<td>a</td>
<td>How big was it?</td>
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<tr>
<td>b</td>
<td>Was it pathologic?</td>
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</table>
9. C-25 is a CAT of the neck and chest, which noted specific masses located at _______________ and ________________.

10. In C-25, the masses were consistent with ________________, which is probably ________________.

11. In C-26, the films suggested what diagnosis?

C-20 through C-26 / Answers

1. (a) ethmoid  
   (b) maxillary  
   (c) sphenoid  
   (d) frontal  
   (e) sinusitis  
   (f) “-itis” - inflammation of (sinus)  
2. metastatic lesions; yes - 6\textsuperscript{th} rib probable, and lower thoracic vertebral body  
3. hypo-too little (echo) and hyper-too much  
4. fibroids  
5. 2; DIP  
6. (a) mesenteric - superior mesenteric artery  
   (b) bleeding  
7. (a) 1 cm  
   (b) no (at least probably no)  
8. parapharyngeal and paratracheal space (remember the difference between para and peri?)  
9. tumor; malignant  
10. gouty tophus

C-27

HISTORY: 47 year-old status post CABG.

PA AND LATERAL CHEST: In comparison to the previous exam there has been interval removal of the right central line. Interval removal of skin staples has been done. There is left basilar atelectasis and small bilateral pleural effusions, which are unchanged.

IMPRESSION:
1. Status post CABG (coronary artery bypass graft) with interval removal of CVP (central
venous pressure) line and skin staples.
2. Small bilateral pleural effusions and atelectatic changes of the left base consistent with postoperative changes.

**C-28**

As in C-27: Check line placement for new Cordis (Proper noun instrument).

**AP PORTABLE:** Compared to previous exam, there has been interval removal of the right internal jugular Swan-Ganz catheter. A right internal jugular Cordis has been inserted. The tip is in the region of the superior vena cava. Bilateral pleural effusion is present and bibasilar atelectatic changes.

**IMPRESSION:**
1. Interval removal Swan-Ganz catheter.
2. Status post CABG with postop atelectatic changes and pleural effusions.

**C-29**

**ROUTINE CHEST:** PA and lateral views submitted with previous films for comparison. Significant cardiomegaly and increased density overlying the expected location of the aortic valve. Lungs are free of infiltrates bilaterally. The osseous structures are intact.

**IMPRESSION:** Cardiomegaly and suggestion of aortic valve calcifications.

**C-30**

**ROUTINE CHEST:** Normal cardi mediastinal silhouette. Postoperative changes from previous median sternotomy are noted. Mild blunting of the left costophrenic angle is noted presumably related to surgery. There are atelectatic changes of the left lower lobe.

**C-27 through C-30 / Questions**

1. C-27 is a chest x-ray which was done postoperatively for a CABG (sounds like “cabbage”), which stands for: ________________________________.
2. In C-27, an atelectatic condition is noted.

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<tbody>
<tr>
<td>a</td>
<td>What does that mean?</td>
</tr>
<tr>
<td>b</td>
<td>Where was “it” located?</td>
</tr>
</tbody>
</table>
3. In C-27 what does CVP stand for?

4. In C-27, pleural effusions were noted. What are they?

5. C-28 is the same patient with placement of a new line (tube).
   (a) Removal of the Swan-Ganz catheter was done from what vessel?
   (b) Where is that located?

6. In C-28, where is the tip of the Cordis catheter?

7. In C-29, enlargement (-megaly) of the __________________ is noted, and calcifications of the _________________________________.

8. C-30 is a chest x-ray; cardio- stands for __________ and mediastinal for _________________________________.

C-27 through C-30 / Answers

1. CABG = coronary artery bypass graft (did you remember the Abbreviations List in Medical Terminology I?)

2. 
   (a) incomplete expansion of the lung
   (b) left base (of the lung)

3. central venous pressure (a tube, [or line], which was placed postoperatively)

4. pleural = lung; effusion = pour or spread out

5. mn,mn
   (a) internal jugular
   (b) neck

6. in the region of the superior vena cava

7. heart (cardia); aortic valve

8. heart; mediastinum
PA AND LATERAL CHEST, THORACIC AND LUMBOSACRAL SPINE, RIBS SERIES AND PELVIS:
Examination of the chest demonstrates a hyperlucent lung on the left consistent with mastectomy. The heart size, pulmonary vascularity and parenchyma are normal without evidence of effusion or infiltrate. Old rib fractures are evidenced on the right 4th through 6th anterolateral portions. Mild but diffuse osteopenia is evident.

Thoracic spine exam shows no evidence of vertebral body collapse, pedicular sclerosis or focal lytic abnormality. Mild anterior wedging is present at the L2 vertebral body. Metallic surgical clips are seen adjacent to the L2 vertebral body. Schmorl’s nodes are evident through the lumbar vertebral bodies and a lumbarized S1 transitional vertebra is evident. Multiple midline metallic anterior abdominal sutures are evident within the pelvis. Evaluation of the sacrum is difficult due to the overlying bowel gas and fecal content.

IMPRESSION:
1. Old rib fractures.
2. Post-surgical changes within the abdomen and pelvis.

ABDOMINAL ULTRASOUND: No focal liver lesions are noted. There is no evidence of intrahepatic biliary obstruction. The right lobe of the liver measures 9.7 cm in the longitudinal dimension. No focal spleen lesions are noted. The kidneys appear unremarkable.

IMPRESSION: No evidence of tumor.

CAROTID DOPPLER ULTRASOUND: Small amount of plaque is seen at the origin of the internal carotid arteries bilaterally, greater on the right side. Velocities do not demonstrate evidence of hemodynamically significant stenosis. Antegrade flow is noted in the vertebral and external carotid arteries. Triphasic flow is noted in the subclavian artery.

IMPRESSION: Mild atherosclerotic plaque at the origin of the internal carotid arteries bilaterally, greater on the right side, without evidence of hemodynamically significant lesion.

THYROID ULTRASOUND: The thyroid gland appears diffusely inhomogeneous with focal nodularity in the upper left pole measuring approximately 2 x 2 cm. Both thyroid lobes measure
approximately 6 cm in the longitudinal dimension and 2.7 cm in the AP. Increased flow, resistance flow is noted to the thyroid gland.

**IMPRESSION:** Findings compatible with adenomatous hyperplasia. Other neoplastic entities cannot be excluded. Recommend correlation with nuclear medicine studies if clinically indicated.

**C-35**

**RENAL DOPPLER ULTRASOUND:** The right kidney measures approximately 10.6 cm without architectural abnormality. The right renal segmental artery Doppler exam demonstrates normal waveform and no evidence of stenosis. The left kidney is not well visualized but does demonstrate areas of hyperechogenicity with approximate measurement of 3.7 cm. The left kidney is not well seen on the previous exam.

**IMPRESSION:**
1. No evidence of right renal artery stenosis or focal abnormalities.
2. Small, not well visualized left kidney compatible with history of nonfunctional kidney.

**C-36**

**ULTRASOUND, RIGHT BREAST:** Ultrasound examination performed on the right breast in the area of the palpable abnormality. No cystic or solid lesions are noted in this area.

**IMPRESSION:** Normal breast.

**C-31 through C-36 / Questions**

1. **C-31 is a series examining the:**

   a
   b
   c
   d
   e

2. **C-31 shows a hyperlucent lung. What is hyperlucent?**

3. **C-31 notes a mastectomy. This is removal of what?**
4. In C-31, describe how to pronounce (using the sounds phonetically):

<p>| | |</p>
<table>
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<tbody>
<tr>
<td>a</td>
<td>parenchyma</td>
</tr>
<tr>
<td>b</td>
<td>osteopenia</td>
</tr>
<tr>
<td>c</td>
<td>pedicular</td>
</tr>
</tbody>
</table>

5. C-31 notes the presence of metallic sutures. What then is the status of the patient?

6. C-32 notes *intrahepatic*, which means?

7. C-33 is a Doppler ultrasound (a technique) done in this case to look at the internal ________________ arteries on which side?

8. In C-33, why would velocities be measured?

9. How is *plaque* pronounced?

10. In C-33, *triphasic* is a word meaning what?

11. Make a word for two phases: ____________; one phase: ______________

12. C-34 is an ultrasound of the thyroid gland; *inhomogenous* means what?

13. Did C-34 note a normal thyroid? Yes or No? Why?

14. C-35 is an ultrasound of the renal system.

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<tbody>
<tr>
<td>a</td>
<td>Was stenosis (a closing down process) present?</td>
</tr>
<tr>
<td>b</td>
<td>Did the left kidney show hyperechogenicity?</td>
</tr>
<tr>
<td>c</td>
<td>Do you think word in “b” is related to hyperechoic?</td>
</tr>
</tbody>
</table>

15. C-36 is an ultrasound of _________________. What was the impression?

---

**C-31 through C-36 / Answers**

1. 
   (a) chest  
   (b) thoracic spine  
   (c) lumbosacral spine  
   (d) ribs  
   (e) pelvis
2. increased radiolucency or too much lucency
3. breast
4.  
   (a) pair-n’kuh-muh
   (b) aus’teeo-pee’knee-uh
   (c) ped-ick’yoo-lurh (root = pedicle)
5. postoperative
6. into (intra) hepatic (liver) - into the liver
7. carotid - both - (bilateral)
8. to check blood flow recognizing that if it is diminished, restrictions (plaque) are present
9. plack
10. three phases
11. biphasic, uniphasic
12. in=not - not homogeneous
13. no - there was adenomatous hyperplasia (a as in apple, den-oh’muh-tuss, hyper-play’zhia)
14.  
   (a) no
   (b) yes
   (c) yes
15. breast; normal breast

C-37
ABDOMINAL ULTRASOUND: Multiple stones are present in the gallbladder without gallbladder wall thickening. Common bile duct not dilated and no focal liver lesions are noted. The right kidney appears normal. The left kidney demonstrates mild dilatation of the collecting system with an extrarenal pelvis. No dilated ureter is able to be followed inferior to the kidney. No bladder abnormalities are noted. The abdominal aorta measures approximately 2.4 cm in the AP dimension. The spleen appears unremarkable.

IMPRESSION:
1. Cholelithiasis.
2. Grade I to II hydronephrosis of the left kidney without apparent etiology.

C-38
CT-GUIDED BIOPSY, LEFT KIDNEY:
After advised consent was obtained, the patient was brought to the CT room and prepped and draped in the usual manner. Under CT guidance, 3 passes through the left kidney were performed after local analgesia was obtained utilizing 1% xilocaine and systemic analgesia with 25 mg of Demerol. Three passes through the left kidney were performed utilizing an 18-gauge bioptic gun. Two specimens were sent for histology and placed in formalin and the third was placed in normal saline and sent for C&S (culture and sensitivities). The patient tolerated the procedure well and was returned to the ward.
IMPRESSION:
1. Three biopsies obtained of the left kidney, superior pole, through the heterogeneous area noted on previous exam. The area was again noted on the present study and could represent either an infiltrating tumor or, most likely, pyelonephritis.
2. Post procedure cuts through the lower portion of the chest reveal no evidence of pneumothorax.
3. Diagnosis pending pathology reports.

C-39

PA CHEST:
PA and lateral chest were compared with previous x-ray. There is an angular region of density noted in the right middle lobe, which is unchanged from the previous exam. There are also plate-like linear densities located in the right upper lobe and right lower lobe, which are unchanged. These areas are most compatible with atelectasis and post biopsy changes. The left lung has no parenchymal abnormality. The right costophrenic angle is blunted, also noted on the lateral in the posterior sulcus, which is unchanged from previous exam. However, fluid cannot be ruled out on these films. There is a left subclavian Groshong catheter with the tip located at the junction of the brachiocephalic vein in the superior vena cava. Mediastinum and heart are within normal limits.

IMPRESSION:
1. No change from previous exam.
2. Groshong catheter tip at the junction of the left superior vena cava and brachiocephalic vein.

C-40

RETROGRADE URETHROGRAM: Preliminary film of the abdomen demonstrates degenerative changes of the lower lumbar spine and right hip with a few vascular calcifications. There is smooth irregularity of the contour of the anterior urethra with the area of narrowest luminal diameter measured at 3 mm near the junction of the penile urethra. There is an impression on the inferior aspect of the bladder of an enlarged prostate.

C-37 through C-40 / Questions

1. C-37 is an ultrasound:

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<th>a</th>
<th>Of what?</th>
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<tbody>
<tr>
<td>b</td>
<td>Were stones present?</td>
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</table>
c. What is the abdominal aorta?

d. How big was it?

e. Where did it measure from? (hint-AP)

2. C-38 is a guided biopsy to the kidney:

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<tr>
<td>a</td>
<td>How many passes were made?</td>
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<tr>
<td>b</td>
<td>Were any samples taken?</td>
</tr>
<tr>
<td>c</td>
<td>If so, how many?</td>
</tr>
<tr>
<td>d</td>
<td>A possible infection of the kidney was noted “–itis;” what is the word noting that infection?</td>
</tr>
<tr>
<td>e</td>
<td>What does the answer in “d” mean?</td>
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</table>

3. C-39 is a chest exam. A region of density was located at? _________________ and atelectasis (at-tull-eck -tuh-sis) was present? Yes or No?

4. In C-39 a catheter was present, which likely means:

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<tr>
<td>a</td>
<td>The patient’s status is?</td>
</tr>
<tr>
<td>b</td>
<td>Where was the catheter tip?</td>
</tr>
<tr>
<td>c</td>
<td>Why would they want to know that?</td>
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</table>

5. In C-40, the prostate was? ________________________________

---

C-37 through C-40 / Answers

1.
   (a) abdomen
   (b) yes
   (c) blood vessel
   (d) 2.4 cm
   (e) front to back

2.
   (a) three
   (b) yes
   (c) three
   (d) pyelonephritis
   (e) infection of the kidney
3. right middle lobe; yes (compatible with atelectasis)
4. 
   (a) postoperative
   (b) junction of the left superior vena (veena) cava (cave-uh)
   (c) to see if the placement was correct
5. enlarged

C-41

**IVP:** The preliminary film of the abdomen demonstrates a rim-like calcification in the right upper quadrant measuring 3 x 4 cm. On subsequent films this is demonstrated to be anterior within the abdomen and probably represents either a large calcified gallstone or calcification within the wall of the gallbladder itself. Following administration of the intravenous contrast, there is bilateral excretion. The right kidney has an unusual axis, although no mass effect is seen. There is very mild blunting of the inferior pole calix on the right as well as some fullness of the right renal pelvis and the remainder of the calices. This improves following voiding. The ureters are normal in caliber and contour. The left kidney appears normal. The bladder demonstrates a mild postvoid residual.

**IMPRESSION:**
1. Calcified gallstone vs porcelain gallbladder.
2. Blunted right lower pole calix suggesting previous obstruction or infection causing caliceal clubbing.

C-42 — (this is a postoperative film)

**URETERAL STENT PLACEMENT:** The first film demonstrates a catheter overlying the region of the left kidney. The region of the bladder is not on this film. The bladder appears to extend below the symphysis pubis. The second film demonstrates a stent in place on the right. The upper end of the stent is coiled and presumably within the renal pelvis. The catheter is not present on the right. On the final film, two ureteral stents are present with the upper end of each coiled in the projected location of the renal pelvis and the lower end coiled in the inferior pelvis. The distal end of the left stent is higher than the right and is not as completely coiled. The soft tissues extend below the floor of the pelvis compatible with bladder prolapse.

**IMPRESSION:**
1. Bladder prolapse.
2. Partial end coiled in distal end of left ureteral stent compatible with stent retraction into left ureter.
C-43 — Pathology Report

PATHOLOGY REPORT:

DIAGNOSIS: Right forearm mass, angiolipoma.

SPECIMEN: Tissue from right forearm.

GROSS: Tissues from right forearm are 3 fragments of well demarcated, lobulated adipose tissue which vary on the external surface from a bright yellow appearance to a pink, red, yellow appearance measuring 1.0 x 0.5 x 0.4 cm; 3.5 x 1.5 x 2.0 cm; and 3.7 x 2.2 x 1.5 cm. The erythematous fragment is slightly firmer than the other two. Sections reveal soft, bright yellow parenchyma and a firmer, pink-pale yellow parenchyma, with the erythematous sections included.

C-44

DIAGNOSIS: Possible endometrial polyp.

SPECIMEN: Endometrial curettage curettements.

GROSS: Received labeled with patient name is a 1.5 mL aggregate of red-pink soft tissue fragments and red clot.

C-41 through C-44 / Questions

1. C-41 is an IVP. What does IVP stand for?

2. In C-41, were stones found in the kidney?

3. In C-41, what do you think postvoid means?

4. C-42 is a ureteral stent placement (surgical procedure). (note: a stent is a support device to hold a tubular structure open, or provide a stiff apparatus for supportive purposes – IT IS NOT A STINT)

   a. Where is the upper end of the stent?
   b. How many stents are present?
   c. What does bladder prolapse mean?

5. C-43 is a pathology report.
6. C-44 is a pathology report.

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<tr>
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<th>Where was the sample obtained?</th>
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</table>

**C-41 through C-44 / Answers**

1. intravenous pyelogram  
2. no (found in the gallbladder)  
3. void = urination (typically), so postvoid means after urination  
4. within the  
   (a) renal pelvis (presumably);  
   (b) two;  
   (c) a falling down or sinking  
5.  
   (a) arm  
   (b) lobules = small lobes - adipose = fatty, so fatty lobes of stuff  
6.  
   (a) uterus (endometrium [endo-me’tree-um] is lining inside the uterus)  
   (b) scraping  
   (c) red & pink fragments & red clot  
   (d) polyp (endometrial)

**D. CORRESPONDENCE**

Medicine today is very specialized, thus, patient care often involves many providers representing different specialties, and patients can be and are referred to several such specialists, perhaps even in the course of a single disease process. These providers then communicate with one another by telephone, fax, and letter, sending copies of pertinent reports and laboratory data, and often formal correspondence, not only as a courtesy, but as a practical means intended to keep the referring physician apprised of the patient’s examination and the impression, diagnoses, and/or response to current, intercurrent, or anticipated treatment.

Correspondence is far more formal in writing style and rules than are chart documents. Note
that the addressee, Steve Winn, M.D. is not written as Dr. Steve Winn. Note that “lb” as an abbreviation is not used, rather it is written as *pound*. Though he may have dictated, *DVT* for deep vein thrombosis, it was written out. The date is written out and never abbreviated. The preferred usage of Dear Dr _____ is Dear Doctor __________.

**Report D-1 / Correspondence**

Date goes here

Steve Winn, M.D.
340 Center Street
Centerville, Utah 84014

Subject: Mary Smith

Dear Steve:

Thank you for your kind referral of Marylyn Smith. I was able to perform the upper endoscopy today and the upper tract mucosa was essentially unremarkable.

On repeated questioning it appears there may have been a slight pattern change in her bowel function with more constipation over the last several months. She says she has been on a diet, though had a poor appetite over the last eight months with a 15-20 pound weight loss. Once her deep vein thrombosis is stabilized and the clot has become fixed to the vessel, then we could proceed ahead with a colonoscopy, which will probably be the definitive study.

I’ll keep you posted of her progress as it unfolds, and greatly appreciate the chance to participate in her care with you.

Sincerely,

R. T. Bellyakin, M.D.
RTB:jd

**Note:**

(1) The periods used in “M.D.” in the address at the top – are always used.

(2) The doctor’s initials and the typist’s ID (sometimes initials, sometimes numerical) after the signature. Most transcription companies do this in one form and format or another.
J. John Trent, M.D.
5 Foothill Drive
Salt Lake City, Utah 84109-1494

Subject: Paul Frank

Dear Jack:

Thank you for your kind referral of Paul Frank. You are familiar with this very pleasant 55-year-old gentleman's history of long-standing inflammatory bowel disease, total colectomy with ileoanal pull-through in July of 2008, a history of chronic and recurrent DVT, and a long-standing history of abnormal liver function test with a cholestatic pattern.

Recent abdominal ultrasound has revealed cholelithiasis and a diseased-appearing gallbladder with a suggestion of an abnormal distal common duct. A retrograde study performed today indeed showed an abnormal biliary tree. I was unable to inject contrast past the bifurcation on the right and left hepatic duct. The common duct was abnormal with a long stricture involving the majority of the duct and a suggestion of either a structure or a retained stone; I was unable to wire or brush his distal duct.

I plan to review his operative report from his colectomy to see if Dr. Pace performed a liver biopsy in July of 2008. This would be the reasonable next step. I am concerned about the likelihood of associated primary sclerosing cholangitis as the underlying etiology for this abnormal biliary tree. He has no complaints of pruritus. There was no evidence of varices by a limited inspection of his esophagus. However, he complains of chronic fatigue since his pull-through in July of 2008.

Once I've had a chance to review his operative report and final radiographs, I will review these findings and then make my recommendations accordingly.

I greatly appreciate the chance to participate in his care with you.

Sincerely,

R. T Bellyakin, M.D.
RTB:jd

NOTE: DVT should have been written out, but we wanted you to notice that and answer a question or two.
D-1 and D-2 / Questions

1. The doctor notes that patient Smith's upper mucosa was unremarkable. What instrument did he use, which allowed him to see it?

2. What do you think a DVT might be?

3. Describe what a colonoscopy is. Remember the root word process.

4. On patient Frank, what is a colectomy?

5. Ileoanal is a combining word. What are the two separate words it is made up of?

6. The ultrasound revealed cholelithiasis. (a) Dissect the word, and (b) explain what it means.

   ___________________________/_________________________/_____________________
   ___________________________/_________________________/_____________________

7. Bifurcation has a prefix, which means what?

8. Then trifurcation means?

9. Hepatic is an adjective describing what organ?

10. Sclerosing cholangitis (coal-an-gi tis) may be the underlying etiology (ee-tea-ol-ogy) for the biliary tree abnormalities. What does etiology mean?

11. He has no complaints of pruritus. What is pruritus?

12. Varices are a plural form of what root word?

13. Look at the following singular words and make each a plural word:

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D-1 and D-2 /Answers

1. endoscope
2. DVT = deep venous thrombosis (see Abbreviations Section - Volume I)
3. scoping the colon
4. removal (-ectomy) of the colon
5. ileum and anus; combining the two to make an adjective, ileum is changed to ileo and anus to anal; thus, ileoanal. Note: ileum is another sound-alike word for a bone in the hip; ilium, which is pronounced exactly the same as ileum, but clearly is very different – one of the words you have to know, or face rather humorous consequences (see the root word for humor?)
6. chole = bile; lithiasis = stones.
7. bi = 2
8. tri = 3
9. liver
10. study of the causes of, reason for, or origin of
11. itching
12. varix - enlarged and twisted blood vessel; the plural is made by changing the x to c and adding es
13. 

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<td>fornix = fornices (for-nih-sees) – and you might hear fornixes</td>
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And now to inpatient reports, which are the longer ones.
Section II. INPATIENT REPORTS

Hospital dictation (and some clinical dictation) consists of history-physicals, operations, (though operations are also done on an outpatient basis) laboratory-pathology, cardiology, nuclear medicine, radiology, and discharge summary reports. This section contains history-physicals, operative, discharge summary, and postmortem (autopsy) reports. Obviously, contained within each report are some radiology, laboratory and pathology information, though no actual individual reports of those types are included since they are typically summarized in the discharge information. Those complete reports would be found, however, in the patient chart.

We will start with the “History-Physical Report” since it is the first dictation undertaken for an admission. Such reports generally include the categories set forth on the next page. Some dictators do not state the full heading, though even if shortened in the dictation process, recommendations are that they be written out fully. The abbreviations sometimes used are noted, and bold typeface or underlining is sometimes used depending on client preferences.

Note: Where abbreviations were used in dictation and transcription, the words represented by the abbreviation will sometimes appear in parentheses.

Please Note: You'll see in the following report samples that we have boldfaced all of the headings in the body of the reports, but as we've pointed out earlier, client preferences will drive the need for both underlining and boldfacing for report headings and subheadings. You will be told the preferences when you go to work.
A. Hospital History-Physical Sample

CHIEF COMPLAINT (CC): What the patient says is wrong.

HISTORY OF PRESENT ILLNESS (HPI): A description of what the current problem is.

PAST MEDICAL HISTORY (PMH): What diseases or problems patient had in the past.

SURGICAL HISTORY (SH): Surgeries the patient had in the past (sometimes is included in PMH).

ALLERGIES: What medications or substances may have led to an allergic reaction (sometimes included in PMH).

IMMUNIZATIONS: Sometimes but not always listed in a separate category; may be included in PMH.

FAMILY HISTORY: A history of the diseases/problems in the patient's immediate family.

SOCIAL HISTORY: Education, work, geographic, biographic, marital status; children, smoking, drinking, habits, hobbies, recreation, etc.

REVIEW OF SYSTEMS (ROS): A general review of each of the body systems, though typically only those systems which are creating problems are discussed.

PHYSICAL EXAMINATION (PE): In the history-physical exam, the examination follows the headings below.

GENERAL: How the patient appears; anything notable.
VITAL SIGNS: Blood pressure, heart rate, respiratory rate.
HEENT: Head, eyes, ears, nose and throat.
NECK: Describes the neck, pulses, glands, etc.
CHEST: Can describe the lungs, heart, breasts, sometimes just the heart and lungs with breasts as a separate heading.
BREASTS: Are generally broken out from CHEST as separate headings.
ABDOMEN: Describes the look and palpation of the organs located here.
EXTREMITIES: Arms, hands, legs and feet.
GENITALIA: Describes the genitalia – both external and internal.
RECTAL: Exam of the rectum.
NEUROLOGICAL: Exam of the neurologic status.

LABORATORY DATA: The laboratory data consists of those exams which have been done in the office prior to admission or in the emergency room or outpatient department preceding admission.
**IMPRESSION:** The summary of what the admitting care provider thinks is wrong with the patient (*working diagnoses*).

**PLAN:** What the doctor plans for the patient to undergo at this point and in the subsequent hospital workup process.

---

**A-1 / Hospital History-Physical**

**DATE OF ADMISSION:** 1/31/10

**CHIEF COMPLAINT:**
The patient is a 92-year-old woman admitted for evaluation and treatment of acute GI bleed.

**HISTORY OF PRESENT ILLNESS:**
The patient is a nursing home resident with a history of organic brain syndrome, blindness, deafness, and dementia. She is fed by a percutaneous G-tube. There is no history of upper GI disease according to her current medical records including peptic ulcer disease, liver disease, esophageal varices, etc. There is no history of aspirin or NSAID use according to her chart or from nursing home records. Her recent stools have been dark, but not bloody. Today she was observed to have a large emesis mixed with blood and was referred for evaluation.

**PAST MEDICAL HISTORY:** Past medical history, social history, family history, and review of systems were extensively reviewed on her last admission December 2004. Please see that record. In brief, the patient has a history of aspiration pneumonia, organic brain syndrome, urinary tract infections, and bilateral fractured hips with chronic contractures. She has no chronic medications according to her nursing home record.

**PHYSICAL EXAMINATION:**

**GENERAL:** The patient is an elderly female, talking loudly when disturbed.

**VITAL SIGNS:** Blood pressure 169/72, heart rate 95, respirations 18, temperature 99.2 degrees rectally.

**HEENT:** The eyes cannot be examined due to noncooperation by the patient. She appears to have a cataract OD and an iridectomy OS.

**NECK:** The neck appears to be supple.

**CHEST:** Unremarkable.

**LUNGS:** Clear to auscultation and percussion.

**CARDIOVASCULAR:** Veins - the jugular venous pulse is normal.

Arteries - central and peripheral pulses are difficult to palpate.

Cor - first and second heart tones are normal. Soft S-4 gallop and soft nonspecific systolic murmur present.

**ABDOMEN:** Diffuse guarding with no palpable masses. Bowel sounds are slightly diminished.

**EXTREMITIES:** Bilateral leg contractures in the "fetal position." Upper extremities
are noncontracted and are mobile. No ulcers, sores, or decubiti are evident.

**NEUROLOGIC:**
No focal abnormalities are apparent; the patient is uncooperative with the examination.

**LABORATORY:**
The CBC and chemistry profiles are not available at the time of admission. Guaiac of G-tube aspiration is positive with yellow material. Stool is black, but is guaiac negative.

**IMPRESSION:**
2. Guaiac negative or melenic stool; ? iron ? bismuth ?
3. Organic brain syndrome including nonfeeding, blind, deaf, demented individual with chronic contractures.
4. The patient is DNI/DNR (do not intubate, do not resuscitate) status per the nursing home.
5. History of recurrent urinary tract infections.
6. History of bilateral fractured hips and postoperative surgery with chronic contractures.

**PLAN:**
The patient will be admitted for observation. Conservative management is planned. Invasive procedures will not be performed. Type and cross and transfusion not planned. Compassionate care and comfort measures, however, will be instituted in full.

---

**A-1 / Questions**

1. The patient is fed by a percutaneous G-tube. Explain what *percutaneous* means.

2. Her stools have been dark, which means (a) ______________________ may be present; and, she has (b) *emesis*, which means?

3. The patient has a history of *aspiration pneumonia*. What kind of pneumonia is that?

4. Under Cardiovascular, the word *cor* appears. What does it mean?

5. Heart sounds: a soft S-4 gallop is heard and a systolic murmur. What do you think *gallop* means?

6. On the abdominal exam, there is *diffuse guarding*. What do you think that means?

7. In the **Impression**, the abbreviations *DNI/DNR* appear. Based on what is dictated in the plan, what do you think they mean?
8. In the Plan, it states invasive measures will not be performed. Without going into great detail, what might an invasive measure be in the context of her report?

9. What did the lab data reveal?

10. What was the patient’s temperature?

11. What side was the cataract on?

12. How many heart sounds were noted?

13. What was the systolic pressure? What is the diastolic pressure?

A-1 / Answers

1. percutaneous = through the skin
2. 
   (a) contains blood
   (b) emesis = vomit or vomitus or vomiting
3. aspiration pneumonia = inhaling vomitus
4. cor = heart
5. gallop = a sound like the gallop of a horse; note: there are several murmurs, systolic murmurs, holosystolic murmurs, acrescendo and decrescendo, soft, blowing, etc.
6. diffuse guarding = when someone tries to hit you, you defend yourself, or guard yourself; if someone pokes your stomach where it hurts, you try to stop them and your abdominal muscles reflexively contract or “guard”
7. 
   (a) DNI: do not intubate
   (b) DNR: do not resuscitate
8. invasive measures = any measures which invade the body (gastrointestinal tubing, intravenous feeding, any surgical procedure).
9. nothing – no lab was noted except the guaiac
10. 99.2
11. right (see Abbreviations listing in Volume I)
12. two -- heart sounds were noted
13. 69 = systolic pressure; 72 = diastolic pressure; note: systolic is the reading on top of the / and diastolic below the /
DATE OF ADMISSION: 1/31/10

CHIEF COMPLAINT:
This 74-year-old male is complaining of vomiting, body aches, and being sick, with deep productive cough.

HISTORY OF PRESENT ILLNESS:
The patient is followed in the Internal Medicine Clinic of XYZ Hospital with complex past medical history including chronic obstructive pulmonary disease. He was recently seen in the emergency room on January 2008 for a gastroenteritis treated as an outpatient from which he recovered. He says for the past several days he has noticed generalized body aches and he has felt poorly. On the day prior to admission he developed a cough productive of yellow sputum associated with headache. The patient vomited once last night and once on the day of admission. There has been no further diarrhea. There have been no chills or fever noted at home. The patient has been taking his usual medications including inhalers and low dose prednisone. He received influenza vaccine in November. He has recently been bothered by nocturia and frequency of urination and was referred to urology with a diagnosis of voiding dysfunction, which apparently resolved temporarily. However, the patient now complains of recurrence of these symptoms.

PAST MEDICAL HISTORY:
The patient has a very complex past medical history and has been followed both here and at the VA. He has a history of coronary artery disease with an inferior wall MI diagnosed on EKG. He has had chest pain in the past, but had negative stress test. He has had ethanol abuse dating back to 1980s, but denies current intake of alcohol. He has had elevated liver enzymes in the past. He suffers from chronic pulmonary disease and asthma for which he takes inhalers and prednisone. He denies smoking. He has a history of hiatal hernia and upper GI bleed in the 1970s. He had a positive VDRL treated in 1971. He developed a polyneuropathy, and a workup was done. This is of unknown etiology, possibly related to alcohol abuse. Because of his positive serology he was treated with a full course of IV penicillin as an inpatient. He had a positive PPD (purified protein derivative – tuberculosis test) in 1976 treated with INH (drug) for one year. He has a history of high blood pressure. He has a history of dermatitis, diagnosed as solar dermatitis, polymorphic light eruption for which he takes Triamcinolone cream and uses sunblock. The patient is status post disseminated herpes zoster as well.

SURGICAL HISTORY:

The patient is status post rib fractures, sixth rib. Fractured ankle in 1950.
ALLERGIES:
Aspirin and nonsteroidals.

CURRENT MEDICATIONS:
Theo-Dur 200 mg p.o. b.i.d., prednisone 10 mg daily, Maxzide one half tablet daily, Solu-Medrol 2 puffs b.i.d., Albuterol 2 puffs q.i.d. and q. 2 hours p.r.n., Azmacort inhaler 2 puffs q.i.d, Darvon for pain, Tylenol as needed, Triamcinolone cream b.i.d.

PHYSICAL EXAMINATION:
GENERAL: This is a chronically ill appearing, dark skinned male in mild respiratory distress.
VITAL SIGNS: Temperature 100.6 degrees, pulse 106, respirations 24, blood pressure 122/86.
HEENT: Normocephalic. The right pupil is completely dilated and irregular from old surgery and trauma. Vision is markedly reduced in this eye. The left eye is round and equal and reactive. The ears have clear canals with normal tympanic membranes. The mouth shows multiple dental work and multiple extractions. No lesions are noted.
NECK: Supple. Trachea midline. No nodes are noted. There are bilateral carotid pulses.
CHEST: Diffuse rhonchi and wheezing throughout both lung fields with good air exchange. The O2 saturation is 91%. The respirations are not labored.
HEART: The heart sounds are obscured by the lung sounds and are poorly delineated.
ABDOMEN: Soft, flat, and nontender. No organomegaly.
GENITALIA: The external genitalia are normal.
EXTREMITIES: Evidence of osteoarthritis and wasting of the musculature, particularly in the intracarpal regions. Grip is reduced in both hands. The patient has weakness of musculature in both legs. There is deformity of the right ankle with 1/2 cm whitish ulceration in the right medial malleolus. Reflexes are reduced bilaterally in both upper and lower extremities. The toes are downgoing.

LABORATORY:
Chest x-ray shows mild hyperinflation, no infiltrates. The EKG shows old inferior wall MI (myocardial infarction) and sinus rhythm, PVC (premature ventricular contraction) occasional beat. The pH of 7.44, pCO2 of 32, pO2 of 69, bicarb 23. White count 3500, 53 segs, 5 bands, 15 lymphs, H&H (hemoglobin and hematocrit) 15/44. Glucose 100, BUN 16, creatinine 0.9. Electrolytes showed potassium 3.1. Liver function tests normal except for bilirubin of 1.9.
**ASSESSMENT/PLAN:**

1. COPD with acute exacerbation. The patient will be treated with Albuterol nebulizations and increased p.o. steroids along with continuing his other medications and inhalers. IV hydration will be provided as needed.

2. Chronic polyneuropathy. This condition appears to be stable and no further intervention will be considered.

3. Ulceration of the right medial malleolus. The patient will be given saline wet to dry to this area with debridement as needed.

4. Recurrent symptoms of prostatism. Urology will be consulted for this condition.

**A-2 / Questions**

1. The patient has *chronic obstructive pulmonary disease*. What does that mean?

2. In the past medical history, the patient has *nocturia*. Look up the word and explain what it means.

3. The patient had a posterior wall MI. What is a *MI*?

4. *Ethanol abuse* is another name for?

5. *VDRL* is a test for what (see your Laboratory List, Medical Terminology I)?

6. What was noted on exam of the *tympanic membranes*?

7. What was the anatomic position of the trachea?

8. Describe the findings on just the head exam: ________________________________

9. Dissect the word *polyneuropathy's* components by definition.

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10. The patient has a history of *solar dermatitis*. What does this mean?
11. What does ORIF stand for?
12. What does TURP mean?
13. What does HEENT mean?
14. Diffuse rhonchi (ronk-eye) are heard on examination of the chest. Look up rhonchi and explain what diffuse rhonchi means: __________________________
15. The doctor couldn't hear the heart sounds very well. Why do you suppose that was?
16. (a) Was pathologic organomegaly noted?
   (b) What part of the body is the exam in (a)?
17. Were electrolytes done? Yes or No?
18. Who will be consulted for the prostatism?
19. How often was the patient to use Albuterol?

A-2 / Answers

1. he has difficulty breathing – breathing obstruction
2. nocturia = urination at night (noc = nocturnal anduria = urine)
3. MI = myocardial infarction
4. ethanol abuse = alcohol abuse
5. syphilis
6. normal
7. midline
8. normocephalic (normally cephalic or normal cephaly)
9. polyneuropathy — “poly” = many or large amount of; “neur” = association with nerve or nervous system; “o” = combining vowel; “pathy” = disease or abnormal state
10. solar dermatitis —“solar” = sun; “derma” = skin; -itis = inflammation —inflammation of the skin caused by the sun
11. ORIF = **Open Reduction, Internal Fixation**; the ankle had to have the bone reduced and fixated with a pin to hold the bone pieces in place -- "anatomic reduction"

12. TURP = **Transurethral Resection of the Prostate**; *trans* = across or through the urethra; “resection” = surgical removal * Voila! * the prostate was removed via the urethra; he had benign (not malignant) hypertrophy of the prostate

13. HEENT = head, eyes, ears, nose and throat

14. diffuse rhonchi = abnormal coarse breathing sounds heard in the bronchial tubes through a stethoscope, usually during expiration (“inbreathing” = inspiration; “outbreathing” = expiration)

15. noisy breathing obscured the heart sounds.

16. (a) no; (b) where is this exam? = abdomen

17. yes

18. urology

19. 2 puffs 4 x a day and every 2 hours p.r.n. (whenever needed)

---

**A-3 / Hospital History-Physical**

**DATE OF ADMISSION:** 1/31/10

**CHIEF COMPLAINT:**
"I have chest pain."

**HISTORY OF PRESENT ILLNESS:**
The patient has received little care at this hospital. Her medical records indicate a history of coronary disease dating back several months, and probably significantly before then. There is history of previous myocardial infarction, date undetermined. She presented initially with chest pain. She was treated conservatively and referred to Cardiology Associates where she demonstrated triple vessel coronary artery disease including proximal and midserial lesions in the left anterior descending, lesion in the circumflex-obtuse marginal and in the midnight coronary artery. She received triple coronary bypass grafting; no details are available with respect to the surgery. The patient claims to have recovered uneventfully and has had no chest pain since then. In recent months she moved back to this area. Tonight while reading at home she developed left precordial chest pain. This was steady, radiated to the neck and was associated with shortness of breath and diaphoresis. This lasted about four hours with relief in the emergency room "when they put in my IV." She has no complaints at present. She is uncertain, but thinks her chest pain is different from her previous MI pain.
PAST MEDICAL HISTORY:

ALLERGIES:
PENICILLIN, DILTIAZEM, AND LISINOPRIL.

MEDICATIONS:
Unknown antihypertensive drugs.

SOCIAL HISTORY:
The patient is single and never married. She is a retired grade school teacher. She lives with her brother. She is a life long nonsmoker and nondrinker. She was never in the military.

FAMILY HISTORY:
Not further contributory.

REVIEW OF SYSTEMS:
An episode of falling on several occasions several years ago. She was evaluated and was told she had no major abnormalities (? vertigo ? vertebral basilar ? transient ischemic attacks TIAs ? drug side effects).

PHYSICAL EXAMINATION:
GENERAL: The patient is a rather delightful, elderly woman not in acute distress.
VITAL SIGNS: Blood pressure 160/125, respirations 16, temperature 98.7 degrees, pulse 69. Repeat blood pressure 130/90.
HEENT: Anisocoria is present. Iridectomy scar is noted on the left.
NECK: Supple without masses.
LYMPH NODES: No remarkable lymphadenopathy.
CHEST: Anterior median sternotomy scar.
BREASTS: Senile.
LUNGS: Clear to A and P (auscultation and percussion).
CARDIOVASCULAR: Veins - the JVP (jugular venous pulse) is normal. Arteries - central and peripheral pulses are normal. Cor (not core!) - first and second tones are normal although the second heart sound is quite prominent. There is a soft, nondescript systolic murmur. There is a ? soft diastolic decrescendo blow.
ABDOMEN: No organomegaly, masses, or tenderness. The bowel sounds are normal.
EXTREMITIES: No cyanosis, clubbing, or edema. The right elbow is chronically dislocated.
NEUROLOGIC: Physiologic.

LABORATORY:
The EKG shows sinus rhythm, anteroseptal MI and no acute changes. There is no change from the previous electrocardiogram dated 7/24/98. Chest x-ray shows evidence of previous coronary bypass surgery, otherwise clear and unremarkable. Chemistry profile includes BUN 39, creatinine 1.0 and is otherwise normal including glucose of 101. PTT and PT are normal. The CBC has not returned.

IMPRESSION:
1. Acute chest pain syndrome, worrisome for recurrence of ischemic coronary artery disease. No other etiology is apparent.
2. Organic heart disease including:
   A. Multivessel coronary artery disease.
   B. Status post anterolateral MI, ? age.
   D. Asymptomatic until the present illness.
3. History of diabetes mellitus.
4. Hypertension.
5. History of hypercholesterolemia.
6. Chronic right elbow dislocation.
7. Bilateral iridectomy and anisocoria.
8. History of positive PPD; treated with INH x one year.
9. History of allergies to penicillin, Diltiazem, and Lisinopril.

PLAN:
The patient will be admitted to the intensive care unit and treated for probable unstable angina in a patient post coronary bypass surgery. There is no evidence of acute infarction and thrombolytic therapy will not be utilized.

A-3 / Questions
1. Coronary disease is a disease of the: ___________________ and cor = ________________.
2. The left anterior descending is probably an: _____________________
3. Circumflex obtuse is probably an: _____________________
4. What are the three (triple) vessels involved in her disease?
5. Based on only what you now know about bypass, what was done on this patient with a triple bypass surgery?

6. Dissect *precordial*: What does each word element mean?

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7. The patient had shortness of breath and diaphoresis (die-a-for-e -sus). Look it up and write the meaning: ________________________________

8. What does hypercholesterolemia mean?

9. Dissect and explain what pyelonephritis means:

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10. What are (a) TIAs? (b) What do you think (a) means?

11. On the PE (physical exam), under HEENT, the patient had an *iridectomy* scar; what was removed?

12. On the chest was an anterior median *sternotomy* scar; this means the sternum had been opened into (-tomy). For what purpose was the chest opened?

13. On the exam of the heart, the sounds heard are typical of an exam, familiarize yourself with them once more.

14. Does the patient drink? Yes or No?
15. Were enlarged lymph nodes present on the exam? Yes or No?

16. Does the right elbow have a problem? Yes or No?

17. What were results of the CBC?

18. Will thrombolytic therapy be used? Yes or No?

19. What department of the hospital will the patient be admitted to? The department is abbreviated as what?

20. Neurologic exam was ______________________. Is that normal? ____________

A-3 / Answers

1. heart; cor = heart
2. artery/vein
3. artery/vein
4. (a) left anterior descending artery, (b) circumflex, and (c) coronary artery
5. 3 vessels were grafted and the clot/obstruction removed
6. precordial → “pre” = before, “cor” = heart; note: the region of the chest over the heart = precordium; precordial is an adjective describing location
7. diaphoresis (diah-for-ee-sis) = perspiration/sweating
8. hyper-cholesterolemia = high cholesterol
9. pyelonephritis → pyel/o = renal pelvis; nephr/o = kidney; -itis = inflammation/infection → infection of the kidney
10. TIA = transient ischemic (iss-key mick) attacks; “transient” = occasional or intermittent; “ischemia” = decreased blood supply; since the patient had vertigo (dizziness) the TIAs perhaps were due to decreased blood supply to the brain, though the "?" in the report means the doctor isn't sure to what they were due
11. “irid” = iris – eye; note: “ectomy” = removal; excision; resection
12. triple vessel grafting procedure
13. no question/no answer
14. no
15. no – no lymphadenopathy (lymphadenopathy means enlarged lymph nodes)
16. yes - chronically dislocated
17. not returned – thus, no results
18. no
19. Intensive Care Unit/ ICU
20. physiologic; yes (meaning normal functioning)
DATE OF ADMISSION: 2/12/10

CHIEF COMPLAINT: Rodney Smith is a 23-year-old man admitted with a laceration injury to his left thigh with a possible cellulitis.

HISTORY OF PRESENT ILLNESS: He was chopping with his hatchet last evening and struck himself just above the left knee, sustaining a big contusion with local hematoma and a 2 cm laceration. He has had no fever, chills, or sweats, but he has had lots of pain and lots of swelling, and he was seen in the emergency room today.

In the emergency room, the examination was limited to the left thigh, which showed a 2 cm laceration and surrounding hematoma and slight erythema. There was no lymphangitic streaking and no fever, no chills, no sweats. The knee was aspirated and found to show only bloody fluid and the wound was cultured.

He enters now for IV antibiotics, overnight observation, and probable discharge tomorrow.

PAST MEDICAL HISTORY: Surgeries - none. Medical problems - none. Specifically, the patient denies any cardiac or pulmonary complaints. Accidents - see present illness.

ALLERGIES: None including medications.

REVIEW OF SYSTEMS: Essentially negative. He denies chest pain, shortness of breath, cardiac, pulmonary, GI/GU symptoms. He is an essentially healthy man.

PHYSICAL EXAMINATION:
GENERAL: This is a healthy appearing gentleman complaining of pain and swelling in his left thigh.
VITAL SIGNS: Blood pressure 120/80, pulse rate 80. He is afebrile.
HEENT: Negative.
NECK: Supple.
CHEST: Clear.
COR: Normal sinus rhythm.
ABDOMEN: Soft, active bowel sounds.
ORTHOPEDIC EXAM: There is a 2+ hematoma surrounding the laceration of the left thigh. There is a 1+ effusion. He is able to flex the knee from 0 to 30 degrees and can lift his leg and demonstrates an intact quad
mechanism. He has good distal pulses and good CSM distally.

RECTAL: Not indicated.
GU EXAM: No symptoms.

**X-RAYS:**
The x-rays show no evidence of fracture or air in the joint of the left knee.

**IMPRESSION:**
Contusion/laceration of the left thigh with possible cellulitis, rule out septic knee (doubt).

**RECOMMENDATIONS:**
The recommendation is to admit for IV antibiotics. Will await the tissue cultures and repeat the CBC/diff and vital signs tomorrow with anticipated 23-hour observation/admission and home in a.m.

### A-4 / Questions

1. What is a contusion?

2. **Dissect** *hematoma* and describe what each word component means or does:

<p>| | |</p>
<table>
<thead>
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<tr>
<td>a</td>
<td>hem(e)</td>
</tr>
<tr>
<td>b</td>
<td>a</td>
</tr>
<tr>
<td>c</td>
<td>toma</td>
</tr>
</tbody>
</table>

3. What is a *laceration*?

4. What is *erythema* (air-ih-theme-a)?

5. What is *lymphangitic* (limbf-an-ji-tick) *streaking*?

6. The knee was *aspirated*. Explain what this process entails:

7. What does *CBC with diff* mean? (Check your lab section in Medical Terminology I.)

8. What is *cellulitis*?

9. GI means? /GU means?

10. Does the patient have a fever? Yes or No?

11. *Effusion* was noted on the orthopedic exam. What is that?
12. Could he bend his knee? Yes or No?

13. What is CSM?

14. Did the x-ray show a fracture? Yes or No?

A-4 / Answers

1. contusion = bruise
2. hematoma —“hem” = blood; "a" = vowel connecting compound word; “toma” = collection of
3. laceration = wound in this case — otherwise, cut, etc.
4. erythema = abnormal redness of skin
5. lymphangitic streaking → redness of the distribution of the lymph or blood system ("angitis" = inflammation of lymph or blood vessel; “angitic” = the adjective for angitis)
6. use of suction to take out liquids or gases
7. CBC with diff = complete blood count with differential
8. cellulitis = inflammation of tissue
9. GI = gastrointestinal; GU = genitourologic
10. no
11. effusion = swelling
12. yes (flex)
13. we’re not sure; one of those abbreviations … probably to do with sensory motor exam — one noted listing for CSM (not on our abbreviation list) is cerebrospinal meningitis, which doesn’t fit here.
14. no

Now on to operative reports...
**B. HOSPITAL OPERATIVE REPORT**

Operative reports are dictated shortly after surgery is completed and contain a description of the actual procedure, including the anesthesia used, incision(s) made, what was found, what was done, the closure of the wound(s), bleeding, intravenous substances administered, and patient’s condition at the conclusion of the procedure.

Surgical specialties are generally categorized as follows:

1. General
2. Gynecology-Obstetrics
3. Neurosurgery
4. Ophthalmology
5. Orthopedic
6. Otolaryngology (ENT, or ear-nose-throat)
7. Plastic
8. Thoracic
9. Urology
10. Vascular and cardiac

Typically, the dictator dictates:

- **DATE OF OPERATION:**
- **PREOPERATIVE DIAGNOSIS:** The diagnosis before surgery
- **POSTOPERATIVE DIAGNOSIS:** The diagnosis following surgery
- **OPERATION PERFORMED:** What the procedure was
- **SURGEON:** Who performed it (and who assisted)
- **ASSISTANT SURGEON**
- **ANESTHESIA:** Anesthesia used
- **ANESTHESIOLOGIST:** Who provided the anesthesia
- **FINDINGS:** What was found at surgery
- **DESCRIPTION OF PROCEDURE:** A description of the operation

---

**B-1 / Hospital Operative Report**

DATE OF OPERATION: 2/4/10

PREOPERATIVE DIAGNOSIS: Chronic effusion, left middle ear.

POSTOPERATIVE DIAGNOSIS: Same.

OPERATION PERFORMED: Left myringotomy with PE (polyethylene) tube insertion.
HISTORY: This is a healthy 21-month-old girl who had PE tubes in April of 2009 because of chronic effusions and recurrent ear infections. She has been complaining of some pain in the left ear, but is without a fever. On exam in the clinic on February 3, 2010, the left PE tube was extruded and sitting in the canal. It was removed and an obvious effusion was present in the middle ear. The tympanogram was flat and there was about a 20 dB (decibel) hearing level. The right side still has a functioning PE tube. Because of the effusion, which I presumed was causing the discomfort in her ear, and because in the past the effusions have never cleared up, I thought it was worthwhile to put in another PE tube on the left side before we start to have problem with a lot of infections.

DESCRIPTION OF PROCEDURE: After induction of general anesthesia by mask, the left ear was cleaned and prepped with alcohol. The tympanic membrane was very dull. A myringotomy was made anteriorly. Some seropurulent fluid was suctioned out. A Reuter-Bobbin PE tube was inserted and then Cortisporin drops were put in. The child was then awakened and taken to the recovery room with no apparent complications.

Estimated blood loss less than 1 mL.

**B-1 / Questions**

1. What was wrong with the patient?

2. Dissect myringotomy:

   a myring/a  
   b o (a dropped)  
   c tomy

3. Dissect tympanogram:

   a tympan/i  
   b o (i is dropped)  
   c gram
4. What does PE stand for?

5. What type of anesthesia was used?

6. Why were tubes placed in 1998?

7. What does dB stand for?

8. What does prepped mean?

9. What kind of fluid was suctioned?

10. What was the blood loss?

11. Who was the surgeon?

12. Who was the anesthesiologist?

13. What date was the surgery performed?

**B-1 / Answers**

1. she had ear infections and had a tube placed formerly, which had come out of the ear and needed to be replaced

2. (a) “myringa” = tympanic membrane - drop the “a;” (b) “o” = combining vowel; (c) “tomy” = incision into

3. (a) “tympani” = tympanic membrane/ear drum → drop the “i;” (b) “o” = combining vowel; (c) “gram” = something written, drawn or recorded

4. PE = polyethylene; note: the reports contain the written-out words for your instruction; however, the dictation of the reports would have been dictated "PE" and been transcribed as such as well

5. general

6. chronic effusions and infection

7. dB = decibel

8. prepped = prepared

9. seropurulent (look it up)

10. less than 1 mL

11. Juan Jensen

12. Jari Davis

13. 2-4-10
DATE OF OPERATION: 2/4/10

PREOPERATIVE DIAGNOSIS: Missed abortion/blighted ovum.

POSTOPERATIVE DIAGNOSIS: Missed abortion/blighted ovum.

OPERATION PERFORMED: D&C, suction, sharp. (dilation or dilatation & curettage)

SURGEON: Boyd Allen, M.D.

ANESTHESIOLOGIST: Gayle Brisk, M.D.

ANESTHESIA: Spinal.

FINDINGS: Moderate amount of POCs. (Products of Conception).

ESTIMATED BLOOD LOSS: 50 mL.

COMPLICATIONS: None.

DESCRIPTION OF PROCEDURE: The patient is a 40-year-old female with findings on ultrasound and serial quantitative beta HCGs of a blighted ovum. The patient was given the option of expectant management versus D&C and she preferred D&C. After explanation of risks and benefits, the patient signed the informed consent.

The patient was taken to the operating room and spinal anesthesia was administered. The patient was placed in the dorsal lithotomy position and prepped and draped in the usual sterile fashion. A weighted speculum was placed in the vault and the cervix grasped with a single tooth tenaculum. The cervix was serially dilated with Pratt dilators to accommodate a size 10 Berkeley suction curette. Suction was applied yielding a moderate amount of POCs. After no further tissue was obtained with suction, gentle sharp curettage was performed. One final pass was made with the suction curette as well as the sharp curette, yielding no further tissue.

All instruments were removed from the cervix, and bleeding from the tenaculum sites was stopped with gentle pressure.

Exam under anesthesia at this point revealed an eight week-size uterus, which was firm. No further bleeding was noted.

At the end of the operation the final needle count, sponge count, and instrument count were reported to be correct. The patient was transferred to the Recovery Room in good condition.
**B-2 / Questions**

1. What does D&C stand for?
2. What are POCs?
3. What is HCG (check your lab section)?
4. Where did the patient go when the surgery was complete?
5. How was the cervix dilated? ____________________; and why was it dilated?
6. What was removed?
7. What kind of curettage was performed?
8. Was all the tissue removed?
9. How was bleeding controlled?
10. What size was the fetus?
11. What kind of anesthesia was used?
12. What was the blood loss?

**B-2 / Answers**

1. D & C = dilatation and curettage
2. POC = products of conception
3. HCG = human chorionic gonadotropin
4. recovery Room
5. Pratt dilator; to accommodate the Berkeley suction curette
6. products of conception
7. gentle, sharp
8. yes
9. gentle pressure
10. 8 weeks – uterus was 8 weeks size, so assume fetus is 8 weeks also
11. spinal
12. 50 mL
DATE OF OPERATION: 2/4/10

PREOPERATIVE DIAGNOSIS: Cataract OS, VA 20/400 (Note: OS=left eye / VA=visual acuity)

POSTOPERATIVE DIAGNOSIS: Cataract left eye, visual acuity 20/400

OPERATION PERFORMED: Extracapsular cataract extraction OS (abbreviation for left eye) with posterior chamber intraocular lens plus 23 power

SURGEON: Mark Frederik, M.D.

ANESTHESIOLOGIST: J. Edwards, M.D.

ANESTHESIA: Local.

DESCRIPTION OF PROCEDURE: Adequate anesthesia/akinesia was obtained using Xylocaine 2% and Marcaine 0.75%, injected in a peribulbar manner with supplementation of a small amount of retrobulbar injection. Ocular compression ball was put in place for 20 minutes. The area around OS was prepped and draped. Speculum and traction suture put in place. Conjunctiva opened superiorly. Bleeding controlled by electrocautery. Incision made in the posterior limbus. Two sutures were preplaced. The incision was opened and the sutures looped aside. Occucoat instilled. The pupil was small and did not respond very much to dilating drops. Therefore, three small sphincterotomies were made with the Vannas scissors. Anterior capsulotomy was performed using the cystotome needle. The lens nucleus was gently expressed. It was large. The incision was partly closed. Lens cortical material was irrigated and aspirated from the posterior chamber. Occucoat instilled. The IOL (intraocular lens) was inspected, found to be in good condition, and placed within the capsular bag in the posterior chamber and rotated into a horizontal position. A flap of anterior lens capsule was removed with the Vannas scissors. Occucoat was replaced with balanced salt solution. The incision was closed with sutures of 9-0 nylon and the knots were buried. The conjunctiva was closed with electrocautery. Gentamicin and dexamethasone were injected under the conjunctiva inferiorly. The traction suture and speculum were removed. Gentamicin ointment was instilled. A sterile eye pad and metal shield were applied.

The patient tolerated the procedure well and was discharged to 2 East in good condition.
B-3 / Questions

1. What does “OS” stand for?

2. What does “ECCE” mean?

3. What is a cataract?

4. Dissect the word peribulbar into its component meanings:

   peri
   bulbar

5. The ocular compression ball was probably used for what?

6. Electrocautery means what?

7. Remember "-tomy?" What does this mean in sphincterotomy?

8. What kind of anesthesia was used?

9. Where was the first incision made? Where was the next incision made?

10. The lens was expressed. What does that mean?

11. What was installed in the eye?

12. Where was the lens placed?

13. What kind of sutures were used to close the incision?

14. What was the blood loss?

15. What does VA stand for?
B-3 / Answers

1. OS = left eye; [note: OD = right eye]
2. ECCE = extracapsular cataract extraction
3. cataract = lens becomes opaque so light rays cannot reach retina, therefore vision deteriorates
4. “peri” = in and around; “bulb” = knob-like structure; “bulbar” = adjective of bulb
5. ocular compression = compression to keep blood loss to a minimum
6. electrocautery → “elect” = electrically generated; “o” = combining form; “cautery” = a hot → instrument to burn tissue (to control blood loss in this case)
7. “–tomy” = cutting into -- surgical incision or puncture into – sphincter of eye
8. local
9. conjunctiva; posterior limbus
10. expressed = squeezed out
11. intraocular lens
12. posterior chamber
13. 9-0 nylon
14. 0 – none was mentioned & in this surgery, essentially no blood loss would be expected
15. VA = visual acuity

B-4 / Hospital Operative Report

DATE OF OPERATION: 2/4/10
PREOPERATIVE DIAGNOSIS: Prostate nodule.
POSTOPERATIVE DIAGNOSIS: Prostate nodule.
OPERATION PERFORMED: Transrectal prostate biopsy.
SURGEON: Timothy Burk, M.D.
ANESTHESIOLOGIST: Jason Davis, CRNA
ANESTHESIA: Two percent Anestacon, 15 mL per urethrum x2 rolled gauze Anestacon packings.
SPECIMEN: Prostatic cores.

COMPLICATIONS: None - the patient tolerated the procedure well.

INDICATIONS: This approximately 66-year-old gentleman was noted to have a prostate nodule
on evaluation. The patient subsequently was referred to GU clinic and seen by Dr. Luck in January of 1998 where his PSA was noted to be 1.8. His urinalysis was normal. Prostate exam was significant for midline prostate nodule. It was firm and nontender. The patient is here for outpatient prostate biopsies.

Preoperatively, his urinalysis was normal. He was given gentamicin 80 mg IM (intramuscular) prior to the biopsy. The risks, benefits, alternatives, and complications were explained to the patient. He understood and wished to proceed.

DESCRIPTION OF PROCEDURE: With the patient supine on the operating table, he was placed in the dorsal lithotomy position; the rectal vault was irrigated out with sterile water containing Betadine. The patient does have a midline prostate nodule approximately 0.5 x 0.7 cm. Anestacon/Betadine gauze packing was then inserted per rectum, kept there for approximately 5 minutes while equipment was made ready. The gauze packing was subsequently removed and multiple transrectal prostate biopsies were obtained with the 14-gauge needle and biopsy gun. There was no bleeding during the operative procedure. Reasonable cores were obtained, particularly in the area of the nodule.

At the end of the operative procedure a transrectal gauze packing was inserted. The patient was returned to 2 East in stable condition.

### B-4 / Questions

1. What is the abbreviation for transrectal prostate biopsy?

2. The patient has a problem in what system of the body?

3. What, then, does GU Clinic stand for?

4. What is PSA (check your laboratory section in Volume I)?

5. First the patient was supine on the operating table. Meaning what? Then he was placed in the dorsal lithotomy position. Describe that position.

6. What cavity of the body was entered to obtain the biopsy?

7. Preoperative antibiotic was given of what?

8. Why would the rectal vault be irrigated?

9. What was the size of the nodule?

10. Cores of what were obtained?
B-4 / Answers

1. TPB = transrectal prostate biopsy
2. genital/urinary or genitourinary
3. GU = genitourinary
4. PSA = prostate specific antigen
5. supine = lying on back with knees bent; dorsal lithotomy = the same as for delivering a baby, or having a pap smear (on the back, knees bent, legs spread)
6. rectum
7. gentamicin
8. to reach the prostate, the surgeon had to go through the rectal vault, so stool had to be cleared and the area sterile
9. 0.5 x 0.7 cm
10. prostatic tissue

B-5 / Hospital Operative Report

DATE OF OPERATION: 2/4/10

PREOPERATIVE DIAGNOSIS: Urinary dysfunction.

POSTOPERATIVE DIAGNOSIS: Urinary dysfunction with probable neurogenic bladder.

OPERATION PERFORMED: Cystoscopy under local.

SURGEON: Timothy Burk, M.D.

ANESTHESIOLOGIST: Dylan Davis, M.D.

ANESTHESIA: Two percent Anestacon, 15 mL per urethrum.

FINDINGS: Lax external sphincter tone; 2+ trabeculated bladder wall, short prostatic urethral length.

COMPLICATIONS: None - the patient tolerated the procedure well.

INDICATIONS: This 72-year-old gentleman was noted to have nocturia x3, otherwise good stream. His physical exam was remarkable for right spermatocele. He had an obese abdomen. His prostate was flat, smooth, and 15 grams. Urinalysis was normal. Precystourinalysis also was normal. The risks, benefits, alternatives, and complications and the reason for the procedure were explained and he understood and wished to proceed.

The risks, benefits, alternatives, and complications and the reason for the procedure were
explained and he understood and wished to proceed.

**DESCRIPTION OF PROCEDURE:** With the patient supine on the operating table and placed in dorsal lithotomy position, the external genitalia were steriley prepped and draped in the standard fashion. Fifteen mL of 2% Anestacon were placed per urethra and the 17 French scope with the 30 degree lens was placed into the bladder without difficulty. Anterior urethra was normal. The external sphincter was lax. The prostatic urethral length was 2 1/2 to 3 cm. The bladder wall was 2+ trabeculated. The ureteral orifices were normal size, shape, and position with clear reflux bilaterally. There were no stones seen, no mucosal lesions seen, no areas of hemorrhage, no diverticula, no stones, and no other areas of hemorrhage. The scope was then withdrawn.

The plan on this patient is to see him back p.r.n. I doubt at this point whether his urinary dysfunction can be corrected. I suspect that he has some degree of neurogenic bladder. In addition, he has had coronary artery bypass grafting in the past, and he has significant peripheral vascular disease as well.

The other option is to try him on Ditropan at night and see if his nocturia improves.

**B-5 / Questions**

1. The patient has urinary dysfunction. Describe what “dys” means in the prefix of the word function:

2. Make three words of your own with the “dys” prefix:

   a  
   b  
   c  

3. Patient had nocturia x 3, all of which means what?

4. Dissect precystourinalysis:

   pre  
   cyst  
   o  
   urinalysis
5. The external genitalia were *prepped and draped*. Explain what that means.

6. What are *orifices*?

7. *Reflux* in this report refers to urine. The urine was (describe the color): ____________.

8. What are *diverticula*?

9. If the root word in #8 is *diverticulum*, how and what did it become *diverticula*?

10. What does *p.r.n.* stand for?

---

**B-5 / Answers**

1. “dys” = abnormal, difficult, adverse
2. **lots of options, among which are:** dysuria, dysmorphia, dysmenorrhea, dyspepsia, dysplasia, etc.
3. “nocturia x 3” = he had to urinate at night three times
4. precystourinalysis → “pre” = before; “cyst” (this procedure = cystoscopy); “o” = combining vowel; “urinalysis” = analysis of urine; the urinalysis before this cystoscopy
5. “prepped and draped” = “prepped” is a short form of prepared; thus, the area was prepared (in surgery this means perhaps shaved, and germ-killing solutions are painted on the area); “draped” or “draping” is using sterile material to surround the operation area
6. “orifices” = opening in a body cavity
7. clear
8. “diverticula” = abnormal sac; note: this is not sack
9. remember the plural rule; “-ulum” changes to “-ula”
10. p.r.n. = as needed

---

**B-6 / Hospital Operative Report**

**DATE OF OPERATION:** 2/4/10

**PREOPERATIVE DIAGNOSIS:** Epigastric pain.

**POSTOPERATIVE DIAGNOSIS:** Severe gastritis.

**OPERATION PERFORMED:** Esophagogastroduodenoscopy with gastric biopsy x1, and CLO-test.

**SURGEON:** Charles Focus, M.D.
ANESTHESIOLOGIST: Gary Edwards, CRN

ANESTHESIA: Sedation with Versed 3 mg IV titrated.

INDICATIONS: This 58-year-old female complains of a persistent, several week duration, epigastric pain. She had a workup of her gallbladder where ultrasound was negative for gallstones.

DESCRIPTION OF PROCEDURE: After the patient was given appropriate IV sedation, Hurricaine spray was used on the oropharynx to anesthetize it. The patient was placed left side down, right side up, and the bite block was placed. The scope was easily passed through the patient's mouth and she easily swallowed it down her esophagus. She has a normal appearing esophagus, GE (gastro-esophageal) junction at about 37 cm, with no hiatal hernia noted. The scope was easily passed into the stomach. Severe inflammation throughout the stomach diffusely was seen. The scope was easily passed through a widely patent pylorus into the duodenum. The first part of the duodenum had no inflammation, no ulcer, no mass, no bleeding. The scope was pulled back into the stomach. Retroflexion of the scope was done and again severe gastritis throughout, no ulcers, no masses, no bleeding, no hiatal hernia.

Biopsy was taken of the stomach in the antrum x1 for pathology and the second one for the CLO-test.

After this more looking around was done with the scope and there was no evidence of any masses. The scope was pulled out slowly.

The patient tolerated the procedure well without any complications.

SUMMARY OF FINDINGS:
1. Severe gastritis, diffusely, GE junction at 37 cm.
2. Normal duodenum and esophagus.

B-6 / Questions

1. The patient's problem was *epigastric* pain. Where is that located? Then, dissect the word *epigastrium* into its component meanings:

   | epi | gastrium |

2. The operation was an *esophagogastroduodenoscopy*. Dissect *esophagogastroduodenoscopy* into its component meanings:

   | esophag | }
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<tr>
<th>o</th>
<th>gastr</th>
<th>o</th>
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<tr>
<td>o</td>
<td>duoden</td>
<td>o</td>
</tr>
<tr>
<td>o</td>
<td>scopy</td>
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</tbody>
</table>

3. Make a word meaning the *stomach and duodenum were scoped*: ________________.

4. Make a word meaning the *esophagus and duodenum were scoped*: ________________.

5. Were *stones* present in the gallbladder? Yes or No?

6. The *organs* encountered in the scoping process, in order, were:

| o | gastrduoden |
|---|---|---|
| o | |

7. What does *GE* stand for?

8. Is the word in #7 a *noun or an adjective*?

9. On *retroflexive* exam:

<table>
<thead>
<tr>
<th>Was gastritis present?</th>
<th>Y / N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Were ulcers present?</td>
<td>Y / N</td>
</tr>
<tr>
<td>Was hiatal hernia?</td>
<td>Y / N</td>
</tr>
<tr>
<td>Was bleeding?</td>
<td>Y / N</td>
</tr>
</tbody>
</table>

10. What was the conclusion?

11. Was a biopsy done? Yes or No?

12. How was patient anesthetized?
13. Was the pylorus open (patent)? Yes or No?

**B-6 / Answers**

1. epi = on or above, gastrium = stomach, epigastrium = above the stomach. Epigastric is the adjective, epigastrically the adverb.
2. esophag = esophagus; o = vowel combining letter; gastr = stomach; o = combining vowel; duoden = duodenum; o = combining vowel; scopy = scope process.
3. gastroduodenoscopy.
4. esophagoduodenoscopy.
5. no - ultrasound was negative.
6. esophagus, GE junction, stomach, pylorus, duodenum
7. gastroesophageal
8. adjective.
9. yes, no, no, no
10. severe gastritis, normal duodenum and esophagus
11. yes
12. sedated by IV (Versed) and topical spray
13. yes

**B-7 Operation Report**

PREOPERATIVE DIAGNOSIS: Fetal distress; the patient had been followed in normal labor; shortly after placement of fetal scalp electrode the patient had a prolonged bradycardia. At that time the decision was made to take the patient to the operating room; she was given Terbutaline and moved rapidly to the operating room.

POSTOPERATIVE DIAGNOSIS: Fetal distress.

OPERATION PERFORMED: Primary low transverse caesarean section.

SURGEON: Jon St. Jeor, M.D.

ANESTHETIST: Thomas Brenner, C.R.N.A.

Note: The monitor was reconnected and though the patient had recovered, her cervix was only 8 cm dilated and it was felt that because of her previous tracing that an urgent C-section was necessary.

DESCRIPTION OF PROCEDURE: The patient was brought to the operating room and prepped and draped in the usual manner for a hurried C-section, and given general anesthesia. A Pfannenstiel incision was made through the skin, subcutaneous tissue. The fascia was nicked
with the knife and incised with the Mayo scissors. The fascia was then bluntly and sharply dissected off of the rectus muscles. The peritoneum was entered bluntly. A low transverse incision was made through the lower uterine segment with delivery of a female infant. There was some meconium. The meconium was suctioned on the peritoneum. The Apgar scores were 7 and 8. Cord pH 7.26. Following the delivery of the infant, the uterus was replaced in the abdominal cavity. The placenta was expectantly delivered. Because of the Terbutaline the patient had uterine atony which eventually required Pitocin and one half amp of Methergine to force the uterus to become contracted.

The incision was then closed with a running suture of 0-Vicryl. There were 2 small bleeders and these were closed with figure-of-eight sutures. The tubes and ovaries were noted to be normal. The uterus was replaced in the abdominal cavity. The fascia was closed with 2 running sutures of 0-Vicryl. The skin was closed with clips.

The sponge, needle, and instrument counts were correct. The Foley drained clear urine. The patient left the operating room in good condition.

**B-7 / Questions**

1. The patient had been in normal labor and developed a *prolonged bradycardia*. What is that?

2. What does *fetal distress* mean?

3. Define *primary low transverse caesarean section*:

4. Was the procedure an *emergency*? Yes or No?

5. The drug Terbutaline interfered with the normal pattern of uterine contraction and *atony* developed. The letter “α” as a prefix means “without.” Based on that prefix, define *atony*:

6. The first *incision closed* was in the: _____________________________

7. It was closed with what kind of *sutures*? ___________________________

8. Bleeders were stopped with what kind of *sutures*? ____________________

9. What did the surgeon do with the uterus at this point?

   ________________________________________________________________

10. The fascia is what? And how was it closed?
11. How was the skin closed?
12. What was the status of the urine at the end of the procedure?
13. What do you think a Foley is?
14. How much dilation had occurred prior to the surgery?
15. What was dilating?
16. What is the first 2-letter sound of Pfannenstiel?
17. Were scissors used in the operation? Yes or No? If so, for what?
18. Was meconium present? What is meconium?
19. What is an Apgar?
20. If Apgar is scored from a low of 0 to a high of 10, how was this baby’s score generally?
21. What was the pH of the cord blood?
22. Were the tubes and ovaries examined? Yes or No?
23. What was the status of the organs in 22?

B-7 / Answers

1. bradycardia → “brady” = slow; “cardia” = heart → slow heart (rate)
2. fetal distress = infant (still in the uterus) has abnormal heart rate
3. primary low transverse caesarean section → “primary” = first; “low” = low in the abdomen; “transverse” = right angle to body or organ; “caesarean” = surgical incision through the abdomen and uterus - named after Julius Caesar; also spelled as cesarean (doesn’t need capitalization); “section” = act of cutting
4. yes, due to fetal distress
5. atony = lack of muscle tone/function
6. uterus
7. O-vicryl
8. figure of eight
9. placed it back in the abdominal cavity
10. fascia = fibrous connective tissue supporting soft organs and sheaths; O-Vicryl
11. clips
12. clear
13. Foley = catheter
14. 8 cm
15. cervix
16. f
17. y – incise the fascia
18. y; meconium = a dark green mucilaginous material in the intestine of a full-term fetus
19. Apgar = a method of scoring a newborn on full exam (named after a doctor)
20. baby was in good shape (with 10 being the highest) having a 7, then 8
21. pH was 7.26
22. yes
23. normal

**B-8 / Operation Report**

**DATE OF OPERATION** 2/26/10

**PREOPERATIVE DIAGNOSIS:** Symptomatic cholelithiasis.

**POSTOPERATIVE DIAGNOSIS:** Symptomatic cholelithiasis.

**OPERATION PERFORMED:** Laparoscopic cholecystectomy with intraoperative cholangiogram.

**SURGEON:** Shelly Cook, M.D.

**ANESTHESIA:** General endotracheal.

**FINDINGS:** No inflammation around the gallbladder. The cystic duct was of small caliber. The intraoperative cholangiogram was within normal limits. The gallbladder was noted to contain multiple small stones.

**DESCRIPTION OF PROCEDURE:** Following the induction of an adequate level of general endotracheal anesthesia, the patient's urinary bladder was decompressed with a Foley catheter and the stomach was decompressed with an orogastric tube. The abdomen was prepped and draped in the usual sterile fashion. A transverse small infraumbilical incision was made with the scalpel. The Verres needle was introduced through this incision. The peritoneal cavity was insufflated with carbon dioxide to maintain an intra-abdominal pressure of 15 mm/Hg (millimeters of mercury). A 10 mm trocar was then passed through this incision and the laparoscope was introduced into the abdomen. An additional 10 mm trocar was placed in the epigastrium and two 5 mm trocars were placed laterally in the right side of the abdomen. The gallbladder was grasped and retracted in the cephalad direction. There was no inflammation around the gallbladder. The gallbladder was noted to be a dumbbell-shaped gallbladder.
The cystic triangle was then dissected. The cystic artery was identified, doubly clipped and divided. The cystic duct was then dissected free of its surrounding tissue and was clipped at the junction with the gallbladder. An incision was then made in the cystic duct sharply. A small trocar was passed through the abdominal wall, though which a 5 French whistle-tipped ureteral catheter was introduced into the peritoneal cavity and easily slipped into the biliary tree. This was clipped into position and intraoperative cholangiography was performed using 60% Hypaque under fluoroscopic control. This showed no evidence of filling defects in the biliary tree and there was free flow of contrast into the duodenum.

The catheter was then withdrawn and the cystic duct was doubly clipped and divided. There were several other small vessels in the area, which were clipped and divided. The gallbladder was then dissected off of the liver bed using the electrocautery.

The abdomen was then irrigated, and there was no evidence of ongoing bleeding. The gallbladder was retrieved through the umbilical trocar site. This required extension of the site and opening of the gallbladder for manual extraction of multiple small stones, to facilitate removal of the gallbladder and a small amount of bile and stones were spilled at the level of this incision. These were removed, and irrigated away to the extent possible.

The remainder of the trocars were removed and there was no evidence of bleeding from the trocar sites. The fascia of the umbilical trocar site was reapproximated in a vertical direction using a figure-of-eight 0-Vicryl suture. The skin of each incision was closed with a 4-0 Monocryl subcuticular running suture. Postoperatively, she was taken, extubated and in stable condition to recovery room.

The patient tolerated the procedure well. There were no complications.

SPECIMEN: Gallbladder for permanent pathology.

SPECIMEN TO PATIENT: The stones were given to the patient.

DRAINS: None.

B-8 / Questions

1. We've encountered this word before. Do you remember what cholelithiasis is? Describe: ____________________________________________________________

2. They did this procedure through a ______________________________ scope.

3. Anesthesia was ________________ through a/an __________________ tube.
4. What was the caliber of the cystic duct?

5. What do you think decompression of the bladder means? (a) How did they do that? (b)

6. Dissect (define) orogastric:

<table>
<thead>
<tr>
<th>oro</th>
<th>gastric</th>
</tr>
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</table>

7. Where was the initial incision made?

8. Where is the answer in #7 located on the body?

9. The gallbladder was grasped and retracted in a cephalad (seff’-a-lad) direction. What direction is that?

10. The gallbladder was too large to remove through the small incision. What did the surgeon do to get it out?

11. Where did the gallbladder go and why?

12. Where did the stones that were removed go?

13. What was employed to dissect the gallbladder off the liver bed?

14. What do you think the answer in the former question entails?

15. In context, what is Hypaque?

16. **B-8 / Answers**

1. cholelithiasis = gallbladder or gallbladder duct stones
2. laparoscope (note: “laparo” = abdominal wall; abdomen; “scope” = instrument for visual examination)
3. general; endotracheal
4. small
5. (a) decompression of the bladder = removing the urine (reduce size of the bladder); (b) with a Foley catheter.
6. orogastric → “ora” changed to or-o (o = combining vowel); “gastric” = stomach → mouth and stomach.
7. infraumbilical
8. infra = below; umbilicus = navel. (um-billy-cuss). just below the bellybutton.
9. cephalad direction = “ceph” = head: toward the head
10. extended the incision site
11. to pathology for analysis
12. to the patient (souvenir)
13. electrocautery
14. using an electrical current to cut or burn through tissue et al
15. Hypaque = a dye which is inserted so radiology (x-rays) can be performed to show soft tissue or venous structures, patterns, opacities, etc.

### B-9 / Operation Report

<table>
<thead>
<tr>
<th>DATE OF OPERATION</th>
<th>2/28/10</th>
</tr>
</thead>
<tbody>
<tr>
<td>PREOPERATIVE DIAGNOSIS:</td>
<td>Impingement syndrome, bilateral, left shoulder greater than right.</td>
</tr>
<tr>
<td>POSTOPERATIVE DIAGNOSIS:</td>
<td>Impingement syndrome, bilateral, left shoulder greater than right.</td>
</tr>
<tr>
<td>OPERATION PERFORMED:</td>
<td>Mumford left shoulder.</td>
</tr>
<tr>
<td>SURGEON:</td>
<td>Robert J. Beck, M.D.</td>
</tr>
<tr>
<td>ANESTHESIA:</td>
<td>General.</td>
</tr>
</tbody>
</table>

**DESCRIPTION OF PROCEDURE:** Under general anesthesia and after prepping and draping in the usual manner, a saber cut incision approximately 2 1/2 to 3 inches long was made over the left acromioclavicular joint down through the skin and subcutaneous tissue. The joint was identified. By subperiosteal dissection the distal end of the clavicle and the medial side of the acromion were exposed. Approximately 1 cm of the clavicle was removed with the joint meniscus. Following this, a wedge of tissue was removed from the inferior surface of the acromion. Tear of the rotator cuff was noted. This was repaired directly, under direct vision, following which routine closure and application of a compression dressing finished the case.

The patient was returned to the recovery room in stable condition, having received 750 mL of lactated Ringer's during the course of the procedure, and with an estimated blood loss of less than 20 mL.

### B-9 / Questions
1. An incision was made into the left acromioclavicular joint. Dissect the word.

<p>| | |</p>
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>a</td>
<td>acromion</td>
</tr>
<tr>
<td></td>
<td>b</td>
</tr>
<tr>
<td></td>
<td>o</td>
</tr>
<tr>
<td>c</td>
<td>clavicular</td>
</tr>
</tbody>
</table>

Explain what the word in #1 means: ________________________.

2. Write the word as a noun: ________________________________.

3. Dissect (define) subperiosteal:

| sub | periosteal |

Explain what it means: ________________________________.

4. A tear of the rotator cuff was noted. What did the surgeon do about it?

5. A compression dressing would do what?

6. How much blood did the patient lose?

7. How much of the clavicle was removed?

8. A wedge of tissue was removed from?

9. What is Mumford?

10. What is a saber?

11. Is impingement a medical word? Yes or No?

12. How large was the initial incision?

13. What kind of anesthesia was used?
B-9 / Answers

1. (a) **acromilavicular** → “acromi” = acromion - high point of the shoulder, an extension of the spinous part of the scapula, (b) drop the “n” and add the “o” as the combining vowel; (c) “clavicle” = collarbone – high point of the clavicle where it fastens to the shoulder

2. *acromioclavicle* (noun)

3. **subperiosteal** → “sub” = under; “periosteum” = vascular membrane covering the bones, replace *um* with *al* to convert the word to an adjective denoting location, under the membrane, covering the bone

4. repaired it

5. help prevent bleeding (pressure)

6. less than 20 milliliters

7. 1 cm

8. the surface of the acromion

9. Mumford = the name of the guy (doc) who developed the procedure

10. saber = a kind of a sword

11. no – remember if you can’t find the word in a medical dictionary check an English one – though this word might have been in a medical dictionary

12. 2.5 to 3 inches

13. general

B-10 / Operation Report

DATE OF OPERATION 2/27/10

PREOPERATIVE DIAGNOSIS: Status post fractured left humerus, retained hardware left humerus.

POSTOPERATIVE DIAGNOSIS: Status post fractured left humerus, retained hardware left humerus.

OPERATION PERFORMED: Removal of Rush rod left humerus.

SURGEON: Sam Sutherland, M.D.

ANESTHESIA: General.

DESCRIPTION OF PROCEDURE: With the patient under a general anesthetic and positioned in the beach chair position, the left shoulder was prepped and draped in the routine fashion.

An incision was made following the old incision over the proximal humerus. Sharp dissection.
was carried through skin only, and then blunt dissection carried down to the palpable tip of the rod at the subacromial bursa. The subacromial bursa was split in line with the incision and the Rush rod identified.

The Rush rod was removed without complication using heavy gripping pliers. The wound was then irrigated and infiltrated with 10 mL of half percent Marcaine. The wound was then closed with 4-0 Monocryl stitch in a subcuticular fashion. A light dressing was placed over the top.

**B-10 / Questions**

1. What is status post?
2. The initial surgery required hardware to fix the fracture. This surgery is to _________ it.
3. Where is the humerus?
4. Dissection was carried down to the ________________ at the subacromial bursa.
5. What kind of rod was it?
6. Did they actually use a pair of pliers to remove the rod? Yes or No?
7. Why was an old incision present?
8. What kind of dissection was used in the skin? ________________; and then, what kind for the remainder of the dissection? ________________
9. Did the surgeon really split the subacromial bursa?
10. What was he looking for at the point of #9?
11. What do you think the function of the rod was?
12. What solution was used to irrigate and inject at the conclusion of the procedure?
13. What kind of wound closure suture was used?
14. What type of stitch was used to close?
15. Why do you think the rod would need removal?
B-10 / Answers

1. status post = current status is post (after) a fracture
2. remove
3. humerus = arm - upper arm to elbow
4. rod
5. Rush (proper noun)
6. yes
7. from the surgery when the rod was inserted
8. sharp, blunt
9. yes
10. the rod
11. held the bone in place until healing had occurred
12. Marcaine
13. 4-0 monocryl
14. subcuticular (note: “sub” = under, below)
15. prevent infection, deterioration of screw, rust, etc.

B-11 / Operation Report

PREOPERATIVE DIAGNOSIS: 1. Term pregnancy, positive fetal lung maturity.
2. Breech presentation.
3. Class B diabetes.
4. Macrosomia.
5. Maternal obesity.

POSTOPERATIVE DIAGNOSIS: 1. Term pregnancy, positive fetal lung maturity.
2. Breech presentation.
3. Class B diabetes.
4. Macrosomia.
5. Maternal obesity.
6. Delivered.

OPERATION PERFORMED: Primary low transverse caesarean section.

SURGEON: Suzanne Davis, M.D.

FINDINGS: The amniotic fluid was clear. The infant was delivered from the breech, sacrum, left anterior position, female at 09:20 on 2/27/2009. Apgars 6 and 9. Weight 4270 grams. Chart #220778. The uterus, tubes, and ovaries were grossly normal.

DESCRIPTION OF PROCEDURE: The patient was taken to the operating room and a
spinal block was placed. She was placed in the supine position, with left uterine displacement. The Foley catheter was inserted. The bladder was drained of clear urine. The abdomen was prepared and draped in the usual fashion. A Pfannenstiel incision was made in the usual manner and carried down through fat and fascia. The peritoneum was entered atraumatically and the incision extended inferiorly avoiding the bladder. The bladder flap was created in the usual manner. The lower uterine segment was incised sharply using the knife, and the incision was continued laterally with bandage scissors. The infant breech was somewhat difficult to deliver secondary to maternal obesity. The left leg was then extended followed by the right leg, and following this, the infant body was delivered. Nuchal cord arms x2 were encountered and these were delivered in the usual fashion for breech. There was nuchal cord x1. The infant vertex delivered without difficulty. The mouth and nose were bulb suctioned on the abdomen. The cord was doubly clamped and cut, and the infant was passed to the awaiting pediatrician. Cord bloods were collected.

The placenta was manually extracted. The uterus was exteriorized and the interior explored with a moist lap sponge. The edges of the uterine incision were grasped with Ring forceps and the uterine incision was closed using 0-Chromic suture in a running locking stitch. Several sutures were required to complete the length of the incision. Several further figure-of-eight sutures were required for hemostasis, primarily on the left aspect of the incision. The uterus was then replaced into the peritoneal cavity and again inspected for hemostasis, which remained adequate. The subfascial tissues had hemostasis maintained with Bovie, and also required several figure-of-eight sutures at the superior aspect of the fascial incision, deep to the umbilicus with adequate hemostasis following. The fascia was closed using 0-Vicryl in a running stitch using two sutures meeting in the midline. The subcutaneous tissues were irrigated, and hemostasis maintained with Bovie. The skin was closed with staples.

All sponge and needle counts were found to be correct.

The patient tolerated the procedure well and was taken to the recovery room with stable vital signs.

### B-11 / Questions

1. In the preoperative diagnosis appears as *macrosomia* (mac-cro-sew me-a). What does it mean?

2. The opposite of *macrosomia* is *microsomia*. What does it mean?

3. What is a *breech presentation*?

4. Adding an ‘a’ to the front of a word means *without*. What is *atraumatic*?
5. What does *nuchal cord arms* mean?

6. Also, the infant had *nuchal "cord x one..."* What might this mean?

7. The uterus was *exteriorized*. What would this entail?

8. How was the *uterus closed*?

9. Dissect (define) *subfascial*:

<table>
<thead>
<tr>
<th>sub</th>
<th>fascial</th>
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</table>

10. How was the *subfascial tissue* closed?

11. The *fascia* was closed with?

12. The *skin* was closed with?

13. Why would they *count* anything at the end of the procedure?

14. How was the *lower uterine segment* incised? ___________________________; and, with what?

15. Why was the delivery somewhat difficult?

16. What was the *final part* of the infant’s body to deliver?

17. How could the *mouth and nose* be suctioned on the abdomen?

18. How was the *placenta* removed?

---

**B-11 / Answers**

1. *macrosomia* $\rightarrow$ “macro” = large; “somia” = body
2. *microsomia* $\rightarrow$ “micro” = small; “somia” = body
3. *breech presentation* $\rightarrow$ “presentation” = what part of the infant presented for delivery, head, shoulder, and in this case a “breech” is the feet, knees or buttocks of the infant present at the introitus (in-troyt-us) - [vagina]
4. *atraumatic* = without trauma/injury
5. “nuchal” (new-kull), adjective for nucha, = neck; nuchal cord arms $\rightarrow$ cord wrapped
6. the nuchal cord was wrapped around the infant's neck one time (time = x)
7. the uterus was brought outside the body
8. with 0-chromic sutures in a running, locking, stitch with several further figure of eight sutures
9. subfascial →“sub” = below; “fascia” = connective tissue (sub-fass’-see-uhl) →below connective tissue; note: the letter “l” was added to “subfascia” to make it into an adjective denoting location
10. figure of eight with presumably 0-chromic (though it doesn't say so)
11. 0-vicryl in a running stitch
12. staples
13. to make sure they didn't leave anything inside before closure; hey, it happens!
14. sharply, knife
15. maternal obesity
16. vertex (head)
17. mom’s abdomen – one of those funny (incorrect) ways to express language
18. manually

B-12 / Operation Report

DATE OF OPERATION 2/27/10

PREOPERATIVE DIAGNOSIS: Chronic lateral epicondylitis, left.

POSTOPERATIVE DIAGNOSIS: Chronic lateral epicondylitis, left.

OPERATION PERFORMED: Release of left lateral epicondyle.

SURGEON: Julie Edwards, M.D.

OPERATIVE FINDINGS: There was a small amount of angiofibromatous tissue at the lateral epicondyle. This was removed using a curette and sutured back anatomically.

DESCRIPTION OF PROCEDURE: With the patient under general anesthesia and positioned supine, the left arm was prepped and draped in a routine fashion. An Esmarch (ess-mark) bandage was used to exsanguinate the arm and a tourniquet was applied to 250 mm/Hg. (millimeters of mercury) A lateral incision was made based over the palpable tip of the lateral epicondyle and sharp dissection carried through skin only. Electrocautery was used to maintain hemostasis and blunt dissection carried down to the extensor mechanism.

An incision along the fibers of the extensor mass was then made, extended up as far as the lateral epicondyle, and distal approximately 5 cm. Sharp dissection was carried directly to bone
and the muscle gently elevated off the lateral epicondyle, both inferiorly and superiorly. This allowed identification of the underlying lateral epicondyle.

The operative findings were unremarkable, although there was a small amount of what appeared to be fibromatous tissue between the muscle belly and the lateral epicondyle. A curette was used to remove this tissue, as well as sharp dissection carried down to the level of, but not including the capsule.

A curette was then used to roughen up the lateral epicondyle and the entire wound irrigated. The extensor mechanism was repaired using a running 4-0 Monocryl stitch and the skin reapproximated using a running intercuticular 4-0 Monocryl stitch, following the tourniquet being put down at 19 minutes.

Ten mL of one half percent Marcaine were instilled into the wound (half prior to the incision and half afterwards) and the patient was awakened and a bulky dry dressing was applied.

The patient was then placed in an elbow splint and taken to PAR (Post Anesthesia Recovery Room) in good condition.

There were no intraoperative complications. The needle and instrument counts were correct.

**B-12 / Questions**

1. What is *epicondylitis* (ep‘ih-kon-dill-ite‘is)?

2. On the epicondyle, there was *angiofibromatous* (ann‘-geo-fi-bro‘-mah-tuss) tissue. Dissect (define) *angiofibromatous*:

<table>
<thead>
<tr>
<th>angio</th>
<th>fibroma</th>
<th>tous</th>
</tr>
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</table>

3. An *Esmarch* (ess‘mark) bandage was used to do what and why?

4. After the process in #3, a *tourniquet* was applied. Why was that done?

5. The palpable tip of the epicondyle was located. Does this mean the surgeon just felt around with his finger(s) for that bony protuberance? Yes or No?

6. Tendons and muscles work to extend and to flex. In this case, the surgeon went to the ________________________________ mechanism.
7. What is an *intercuticular* stitch?

8. What is a *subcuticular* stitch?

9. What was the operation performed?

10. What does *mm/Hg* stand for?

11. Why is Esmarch capitalized?

12. What is the primary function (based on the root) of the extensor mechanism?

13. What structure was gently elevated off bone?

14. What kind of *tissue* was noted between the muscle belly and the lateral epicondyle?

15. Was the [joint] capsule itself *dissected? Yes or No?*

16. What was the *total tourniquet time?*

17. What kind of *dressing* was used?

18. Was a *splat* applied? Yes or No?

19. What is *PAR?*

20. What was used to roughen the epicondyle?

---

**B-12 / Answers**

1. epi = on/above, around, condyl = a rounded bump on a bone where it forms a joint, itis = inflammation
2. angio = associated with blood vessels or lymphs, fibroma = fiber - angiofibroma = fibrous vessels or lymphs - adding (t)ous converts the word to an adjective
3. to exsanguinate (ex-ann’gwin-ate) is to remove the blood
4. after exsanguination, the tourniquet (turn-ee-cut) kept the blood from flowing to the operative site
5. yes
6. extensor
7. into the skin
8. below the skin
9. release of the lateral epicondyle (it was trapped)
10. millimeters of Mercury
11. proper noun
12. extends
13. muscle
14. fibromatous
15. no
16. 19 minutes
17. bulky, dry
18. yes
19. post anesthesia recovery [room]
20. curette

**B-13 / Operation Report**

**DATE OF OPERATION** 2/27/10

**PREOPERATIVE DIAGNOSIS:** Abnormal uterine bleeding.

**POSTOPERATIVE DIAGNOSIS:** Endometrial thickening and endometrial polyp.

**OPERATION PERFORMED:** Hysteroscopy, D&C.

**SURGEON:** Jodi McCall, M.D.

**INDICATIONS:** The patient is a 46-year-old G-0 with a history of non-insulin dependent diabetes, morbid obesity, congestive heart failure and hypertension, who has a history of abnormal uterine bleeding since February. She was offered an endometrial biopsy at that time, but she refused. The patient has since had regular periods with frequent intermenstrual spotting and bleeding. The patient finally agreed to endometrial biopsy in November but this was unsuccessful given the patient's morbid obesity and stenotic os. She was consented for hysteroscopy and D&C to adequately evaluate the endometrial lining. Preoperatively she was seen by medicine and she had an echocardiogram and she was cleared for surgery.

**FINDINGS:** At examination under anesthesia, the patient had a midline uterus. It was anteverted and mobile. No adnexal masses were present. She had a stenotic os appreciated and at hysteroscopy she was noted to have fluffy, white endometrial lining. It was irregularly thickened, and she appeared to have some polyps floating from the anterior and posterior walls.

**DESCRIPTION OF PROCEDURE:** The patient was taken to the operating room and prepped and draped in the usual sterile fashion. In the dorsal lithotomy position under adequate spinal anesthesia, the bladder was drained with a red rubber catheter yielding approximately 200 mL of clear yellow urine. Examination under anesthesia was performed; the above findings were noted.
A speculum was placed in the vagina. The anterior lip of the cervix was grasped with a single tooth tenaculum. Starting with a #7 Pratt dilator, the cervix was gradually dilated up to a #10 easily. Next, the hysteroscope was placed into the endocervical canal. We were confident that we were in the endocervical canal, but there was difficulty getting visualization as the picture was very blurry and we could not identify the structures. The camera and the lighting cord were changed, and this did not improve the picture. We used approximately one liter of saline media, which came out through the hysteroscope, but it was felt that possibly the media was not distending the cavity well. We switched to Hyskon and used approximately 50 mL of Hyskon, and we finally got adequate visualization of the endometrial cavity; the above findings were noted. The hysteroscope was then removed.

A Duncan curette was used to obtain endocervical curettings.

The cervix was then dilated to approximately #15 Hanks dilator and endometrial curette was then placed in the cavity and the lining was curettaged. Minimal amount of tissue was obtained. Polyp forceps was placed to get some more tissue, but again there was not much tissue obtained. The uterine lining did feel gritty.

One final pass was made with the Duncan curette to get a few more samples of the endometrium. These were all sent to pathology.

All the instruments were removed from the vagina. The cervix was inspected and there was no bleeding from the tenaculum site. The procedure was then ended.

The patient was taken to the recovery room in stable condition after she was cleaned off.

COMPLICATIONS: None.

SPECIMENS: Endocervical curettings, and endometrial curettings.

B-13/ Questions

1. The procedure was a ______________________________ and a (write out the word):

2. If hyster = uterus, then what is a hysteroscopy (his-tir-ah’scawpy)?

3. Intermenstrual (men-stroo-al) means what?

4. The uterus was anteverted; is this the same as antiverted? Yes or No?

5. What are adnexa (add-nex’a)?
6. The os is what?

7. Is the os a bone? Yes or No?

8. In her case the os was stenotic (sten-ott'-ik). What is the root word and what does it mean?

9. Could you have the condition in #8 in a vessel in or around the heart? Yes or No?

10. What is the root word for cervical?

11. What then is endocervical?

12. If you checked the meaning in #11, can one add endo to metrial? Yes or No?

13. Apparently the first medium (the stuff used to allow the uterus to distend and be seen) used to scope the uterus didn't work very well, so _____________mL of _______________________________ was used.

14. Has the patient ever been pregnant? Yes or No? How do you know? __________

15. Is the patient diabetic? Yes or No?

16. Why was the surgery done?

17. Positionally, where was the uterus?

18. Were polyps noted? Yes or No?

19. What kind of catheter was used to drain urine?

20. To what size was the cervix dilated?

21. Endocervical curettings were obtained with?

22. Two areas were curetted: the _________________ & _______________

B-13 / Answers

1. hysteroscopy and dilatation and curettage
2. hysteroscopy = scoping the uterus
3. intermenstrual = between periods of menstruation
4. no
5. adnexa = accessory parts, which enable an organ to function; in this case, the adnexa of
the uterus, which are the fallopian tubes (fall-o’pee-an)
6. os = bone or mouth-like part (mouth of the uterus)
7. no; it is the mouth of the uterus
8. stenosis (sten-o-se’iss) = abnormal narrowing or constriction
9. yes, stenosis of the arteries and veins is common
10. cervix (root word for cervical)
11. endocervical = inward/within the cervix
12. yes
13. 50 of Hyskon
14. no; G - 0 (gravid = pregnant)
15. yes
16. abnormal uterine bleeding
17. midline
18. yes
19. red rubber
20. #15 (Hanks – the second one)
21. Duncan curette
22. endocervical and endometrial

B-14 / Operative Report

DATE OF OPERATION: 11-15-09

PREOPERATIVE DIAGNOSIS: Necrotizing fasciitis, right arm, status post amputation, right proximal forearm.

POSTOPERATIVE DIAGNOSIS: Same, no recurrent infection.

OPERATION PERFORMED: Insertion of central line and closure of stump wound.

ANESTHESIA: General.

PROCEDURE: After administration of a general anesthetic, a central Groshong line was inserted on the left side and maintained the three channels open with normal saline. The right arm was then prepped with Betadine and draped out free in a sterile manner and a tourniquet was inflated. The wound was felt to be clean but it was debrided slightly just to freshen up the edges and the bone ends were trimmed with a rongeur to smooth them off and shorten them slightly, and then the muscle-fascia was reapproximated over the bone ends with #3-0 vicryl. The skin was separated off the muscle layer slightly to allow for the skin to be pulled over the distal end of the muscle and sutured with a continuous #5-0 nylon and reinforced with interrupted #5-0 nylon sutures.

It was trimmed so there was very little dog-ear formation and then a light fluffy dressing was
applied and secured in place with stockinette tied over the chest and the patient was returned to recovery in ICU. The patient's estimated blood loss was less than 10 mL.

**B-14 / Questions**

1. Patient had *necrotizing fasciitis*. Describe that: ______________________________

2. Why was a *tourniquet* used?

3. What is a *rongeur*?

4. Was recurrent infection noted? Yes or No?

5. What kind of line was placed?

6. How many channels were in the line?

7. Why was skin separated off muscle?

8. What kind of dressing was applied?

**B-14 / Answers**

1. necrotizing fasciitis → “necro” = death; “fascia” = fibrous tissue → dying fibrous tissue

2. to restrict blood flow to the surgical area

3. rongeur = an instrument (like a rasp, it is used to “gouge” chunks)

4. no

5. Groshong (just the way it sounds, grow-shong)

6. three

7. allow skin to be pulled over distal end of muscle [for suturing]

8. light fluffy

**B-15 / Operative Report**

**DATE OF OPERATION:** 11-14-09

**PREOPERATIVE DIAGNOSIS:** Right hip fracture dislocation with posterior wall acetabular fracture and posterior column fracture.
POSTOPERATIVE DIAGNOSIS: Right hip fracture dislocation with posterior wall acetabular fracture and posterior column fracture.

OPERATION:
1. Right posterior column open reduction, internal fixation.
2. Right posterior wall open reduction internal fixation using 2-35 interfragmentary screws and an 8 hole 3.5 reconstruction buttress plate.
3. Posterior column fixed with 35 LCDC 4-hole plate.

ANESTHESIA: Spinal with sedation.

INDICATION: This patient is a pleasant 41-year-old gentleman who was hunting with his brother when they were involved in a motor vehicle accident. He sustained a left pneumothorax with multiple broken ribs as well as a fracture dislocation of the right hip. This was reduced immediately, and then after he had been stabilized at the outside institution, he was transferred here for definitive treatment of his right acetabulum. When he arrived here, plain films and CT scans were remarkable for a posterior wall acetabular fracture, which was displaced, as well as a minimally displaced posterior column fracture. His pneumothorax had subsequently resolved from the previous films.

He had the risks explained; specifically, the risk of osteonecrosis of the humeral head, which is approximately 20% in this case, as well as early osteoarthrosis from the injury. Because of the nature of his injury, including the posterior column and posterior wall acetabular fracture, we recommended open reduction, internal fixation for faster mobilization, and more anatomic reduction. It was hoped that a more anatomic reduction would lead to less incidence of osteoarthrosis and less chance of instability of the hip. After the risks and benefits had been explained in detail, he elected to proceed after all his questions were answered.

PROCEDURE: The patient was placed under spinal anesthetic. We then positioned him in the left lateral decubitus in the beanbag and prepped his leg in the usual sterile fashion. A longitudinal incision was then fashioned sharply with the #10 blade in the classic Kocher-Langenbeck fashion. The tensor was then incised and the gluteus maximus fibers split and bleeders ligated with electrocautery. Following this, the gluteus maximus tendon was released with care taken to avoid any deep plunging and possible injury to the sciatic nerve. The leg was then fully extended and the knee flexed and placed on a padded nail.

The short external rotators including the superior and inferior lamella and obturator externus were then located. The piriformis was located as well. The piriformis was then tagged and dissected off the undersurface of the greater trochanter and similarly, the smaller external rotators were done as well. These were placed as #5 Ethibond sutures.

FINDINGS: The posterior column fracture was clearly visualized and was essentially nondisplaced. The posterior wall fracture was migrated superiorly
and was in fact above the short external rotators. There were some small bits of cartilage and bone in the hip joint, which were removed easily with irrigation. There was a small scout mark on the thermal head. There was no depression of the articular surface of the acetabulum noted.

Thus, after copious irrigation and removal of fracture, hematoma and clot, the exposure was extended down onto the ischium. With the use of a retractor and Bovie electrocautery, some of the fibrous insertions of the hamstring tendons were removed down to bone for later placement of a buttress plate. Proximally, underneath the medius and subperiosteum, dissection was undertaken of the ilium. Care was taken to identify the superior gluteal artery and nerve, which were found in the greater sciatic notch and kept from danger.

A Coburn retractor was then placed in the obturator externus bursa and left to gravity retraction in order to keep the smaller external rotators from the field of view. The sciatic nerve was palpated and kept lax by extending the leg on the stand as noted earlier.

Finally, once the entire area was exposed, we elected to fix the posterior column fracture. This was done with a 4-hole LCDC plate. It was first fixed distally with two bicortical screws and then two screws placed in compression fashion up on the more proximal and cephalad aspect of the posterior column. All screws were drilled, depth-gauged and tapped and then placed under manual power.

The posterior wall fragment was then placed in a reduced position with a soft tissue attachment of capsule intact. This was then redislocated and flipped up and two C-wires placed in retrograde fashion so as to make sure as to avoid the joint surface. The fragment was then reduced and the wires advanced into the quadrilateral plate. Following this, one of the wires was removed, the hole drilled with a Gould 2.5 drill, the holes then tapped, and appropriate length screw placed. Similarly, the distal one was placed as well. Again, care was taken to note the angle of entrance of the drill so as not to plunge into the joint surface. Following placement of the screws, the hip was then ranged and no squeaking or increased friction was noted.

Next, the 8 hole 3.5 reconstruction plate was fashioned so as to dock on both the ischium and then act as a buttress over the posterior acetabular fracture and then fix onto the ilium. The two screws were placed distally into the ischium with the drill. Unfortunately, we did not have a long enough screw to place it bicortically so we placed a fully threaded cancellous screw. Proximally, the plate was slightly prominent, but bent down over the acetabular fragment and then drilled in advance of the screws, it came down and acted in a compression fashion. Two screws were placed in the ilium in a bicortical fashion with care taken not to plunge or injure the intrapelvic veins or nerves.

Again, copious irrigation was used. Intraoperative films were taken and confirmed excellent reduction and no prominence of screws. Inferior and superior lamella as well as the obturator externus and the pyriformis tendons were then attached back to bone with the #5 Ethibond sutures. These were placed through a drill hole and then a Keith needle with a #2-0 suture was used to pull the sutures through. The gluteus maximus tendon, which had been released, was
also reapproximated with #1 Vicryl suture. The tensor fascia lata and gluteus maximus fascia were then closed with interrupted #1 chromic suture. The Scarpa’s fascia was reapproximated with a running #2-0 Vicryl gut suture and subcuticular reapproximated with a #2-0 gut suture as well. The skin was then closed with staples, dressed with adaptic 4x4 ADDs and Mefix tape. A drain was not used. Estimated blood loss was approximately 450 mL. The patient received 6 liters of crystalloid for this.

B-15 / Questions

1. The patient had a fracture dislocation of what?

2. How were they treated?

3. In addition to the fracture, he sustained a _______________ and ________________.

4. What were the risks in this case (for the surgery):

5. Concerns were evident to protect a particular nerve after the opening incision. What was the nerve?

6. What kind of sutures were used?

7. Was the posterior column fracture seen very well? And was it displaced?

8. Was any bone found loose in the fracture site? ____________________________

9. Were any tendons removed while going toward the ischium ___________; if so which one(s)?

10. After the approach to and location of the ischium, _________________ artery and nerve were found in the: ________________________________

11. What direction is cephalad?

12. Do you think the screws used are similar to the ones used for regular carpentry purposes?

13. Did the patient have fluid replacement therapy? Yes or No? If so, what was it? And how much was given?

14. Were there complications? Yes or No?
1. hip fracture dislocation with acetabular fracture and posterior column fracture
2. open reduction, internal fixation (remember “ORIF”), with a metal plate
3. left pneumothorax and multiple broken ribs
4. osteoarthritis and osteonecrosis
5. sciatic nerve
6. Ethibond initially
7. yes and yes
8. yes
9. yes; hamstring
10. superior gluteal, sciatic notch
11. cephalad = toward the head
12. yes -- though the metal must be stainless steel (no rusting permitted)
13. yes; crystalloid, 6 liters
14. no

OK, we’ve done all the workup, any surgery required, and the patient is to be discharged. The patient is not so sick any more?

Now for the **discharge summary** part of the record.

This report summarizes everything that was done for and to the patient, the treatment response, and the elements of the discharge plan.

**C. DISCHARGE SUMMARIES**

The discharge summary summarizes all that was noted on the initial history and physical examination, what transpired in the hospital, including testing (laboratory, radiologic), surgical or invasive procedures, consultations with other providers, how the patient did throughout with the discharge status and disposition or plan.

Typically, the dictator dictates or if not, the MT must know which headings the dictation should be set up under. the report has the following headings:

**ADMITTING DIAGNOSIS:** What the diagnosis was on admission (from the history physical).

**PROCEDURES:** What procedures were done.

**PRESENT ILLNESS [OR] HISTORY:** The current problem discussion.
PAST MEDICAL HISTORY: The past history of the patient and problems.

FAMILY HISTORY: Immediate family history.

SOCIAL HISTORY: May or may not be present; see HISTORY PHYSICAL section.

REVIEW OF SYSTEMS: A review of the body systems.

PHYSICAL EXAMINATION: The physical examination may not be as lengthy or detailed as the one done on the History-Physical. It is usually a more abbreviated exam and is contained in one or two paragraphs without the headings of each body system as separate new heading entries.

LABORATORY DATA: Includes all pertinent exams, blood, urine, x-ray, etc., during this hospitalization.

HOSPITAL COURSE: A general summation of the daily progress of the patient. This part of the note may have headings Problems which generally go in a numerical order, e.g., Problem #1, #2, etc.

DISCHARGE DIAGNOSIS (OR DIAGNOSES): A numerical sequence of the problems, and sometimes whether or not they have been resolved – this section may appear at either the beginning or end of the Discharge Summary.

DISPOSITION OR PLAN: What happens next, the medications the patient is to take, when and to whom s/he is to return to see, dressing changes, stitches out, etc.

C-1 / Discharge Summary

ADMITTING DIAGNOSIS:

1. Diabetic ketoacidosis.
2. Probable urosepsis.
3. Diabetes.
4. Renal insufficiency.

PROCEDURES:

1. CT scan of the abdomen.

HISTORY OF PRESENT ILLNESS: The patient is a 78-year-old male who was brought to the emergency room by his family. Per the daughter, the patient had been feeling bad for two days, then yesterday afternoon he began vomiting and complaining of abdominal pain. He
was seen in the emergency room on October 23, 1998 with hypoglycemia and told to decrease his insulin to 10 units q.a.m. at that time. Per his family this is what the patient had been taking. The patient gets regular care at the Davis Clinic, but comes to the ABC Medical Center Emergency Room when he needs admission.

PAST MEDICAL HISTORY: Diabetes since 1982. Left BKA (below knee amputation) in 1990. Last admission creatinine 1.6 with proteinuria. Retinopathy. Recurrent UTIs (urinary tract infections). PPD positive, treated with INH (drug). Last admission approximately a year ago; the patient had an IVP (intravenous pyelogram) done that showed renal pelvis, ureters and bladder to be full with no frank hydronephrosis. Postvoid catheterization was attempted at that time, unsuccessfully, secondary to prostate hypertrophy.


LABORATORY: First ABG, pH 6.96, CO2 8, O2 100, bicarb 2. Second ABG, pH 7.09, CO2 9, bicarb 3. Urine specific gravity 1.021, 100 protein, 1,000 glucose, 40 ketones, nitrate negative, 2 RBCs, 4 WBCs, many bacteria, cath (catheterization) specimen.

HOSPITAL COURSE: In summary, this is a 78-year-old male with a history of recurrent bronchitis, a neurogenic bladder felt to be secondary to cobalamin deficiency, and a history of recurrent urinary tract infections related to a chronic indwelling Foley catheter, who presented with failure to thrive, but also fever, chills, and a workup that involved a urinalysis consistent with urinary tract infection.

Problem #1) Recurrent urinary tract infections: This patient was admitted to the Internal Medicine Ward, placed at bedrest and hydrated with intravenous solutions. The patient received initial antibiotics including ciprofloxacin and gentamicin. Urine culture subsequently grew out Proteus organisms, plus a subpopulation of Pseudomonas species. Because of the prominent Proteus species, the patient was treated with a cephalosporin for a period of 7 days then was changed to Keflex. The patient had his indwelling Foley catheter removed on the fourth day in the hopes that this would eliminate a potential source of recurrent infection. The patient appeared to have reasonable urine output and serum electrolytes revealed no increase in creatinine.

However, on the eleventh hospital day the patient had a temperature elevation and a leukocytosis. Urinalysis was obtained and revealed increased numbers of white cells. Urine culture again grew Proteus organisms. The patient was treated initially with Ticarcillin Clavulanate with Ciprofloxacin. Once the Proteus was identified the patient was continued on Ticarcillin Clavulanate alone. Chest x-ray at that time also revealed chronic pulmonary infiltrates in the left lower lobe and it was felt that perhaps the fever could have been related to a
hospital-acquired pneumonia. Because of the above, antibiotics were continued. The patient basically did well after this. An indwelling Foley catheter was maintained. The plan is to discharge the patient without an indwelling Foley catheter to the nursing home, and the patient will have q.i.d. in and out catheterizations as this will involve the least risk for recurrent urinary tract infections for him.

Problem #2) Neurogenic bladder: Dr. Edwards did see this patient and recommended the patient have either in and out catheterizations or chronic indwelling Foley catheter. The possibility of the neurogenic bladder being secondary to syphilis is noted and an RPR (rapid plasma reagin test) is pending on this patient, and currently at the state lab.

Problem #3) Recurrent pneumonias: The patient had mild sputum production during the course of the admission. Sputum grew essentially normal oral flora. Chest x-ray revealed a chronic left lower lobe infiltrate and interstitial fibrotic changes in both lower lobes. The patient was never hypoxemic and basically responded well to the antibiotics as far as his chronic bronchitis affected him.

Problem #4) Meningioma: The patient does have a right parasagittal meningioma. This had not had CT examination for a year and a half. A CT scan was obtained and revealed no significant change from prior CT scans. This is felt to be an ongoing problem and stable.

Problem #5) Cobalamine deficiency: The patient did receive vitamin B-12 1,000 micrograms during this admission. It was recommended that he continue to receive monthly cobalamine.

**FINAL DIAGNOSES:**

1. Urinary tract infection, recurrent.
2. Neurogenic bladder.
3. Recurrent pneumonia.
5. Meningioma.

**DISCHARGE MEDICATIONS:**

1. Amoxicillin Clavulanate 1 p.o. t.i.d. x 10 days.
2. Amoxicillin 250 mg p.o. t.i.d. x 10 days.
3. Cobalamine 1,000 micrograms IM q. monthly.
4. Colace 100 mg p.o. b.i.d.
5. Sorbitol 70% 30 mL p.o. q.h.s.
6. Multivitamins one p.o. every day
C-1 / Questions

1. The patient has diabetes. *Ketoacidosis* (kee’toe-acid-o’sis) is a diagnosis made from a test of the urine. Dissect *ketoacidosis*:

<p>| | | |</p>
<table>
<thead>
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<tbody>
<tr>
<td>a</td>
<td>ket</td>
<td>root= drop letters=</td>
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<tr>
<td>b</td>
<td>acid</td>
<td></td>
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2. *Urosepsis*. “Uro” = urine; “sepsis” = ____________________________, which combined means? ____________________________.

3. *Renal insufficiency* means what?


5. *Creatinine* is a study derived from?

6. *Proteinuria* means?

7. An *IVP* was done. This stands for?

8. Void means to urinate (in the medical vernacular = void the bladder of urine). Thus, *postvoid* means?

9. On the 11th day of hospitalization, the patient’s temperature went up and so did the __________________________. These are __________________________ cells.

10. Infiltrates in the lung could mean a diagnosis of?

11. If *hypo* = deficient, and *oxe* = oxygen, then what is *hypoxia*?

12. What procedures were done?

13. Patient had undergone an amputation of what?

14. *PPD* is a test for tuberculosis. Was the patient ever treated for that? Yes or No?

15. Has the patient a problem with his *prostate* gland? Yes or No?
16. Was blood present on the rectal exam? Yes or No?

17. Urine specific gravity was **1021**. Where does the decimal go? MEMORIZE THAT ONE!!!!

18. Does the patient have a urinary catheter in place all the time? Yes or No?

19. Do you think the urinary catheter would cause infection? Yes or No?

20. What organism(s) (germ) did the urine culture grow?

21. How was patient’s cobalamine deficiency treated? And how was it to be administered?

---

**C-1 / Answers**

1. Dissect *ketoacidosis*:

<table>
<thead>
<tr>
<th></th>
<th>ket</th>
<th>root=ketones (organic compound)</th>
<th>drop letters= nes</th>
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<tbody>
<tr>
<td>a</td>
<td>ket</td>
<td>root=ketones (organic compound)</td>
<td>drop letters= nes</td>
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<tr>
<td></td>
<td>acid</td>
<td>from the Latin <em>acidus</em> meaning <em>sour</em></td>
<td></td>
</tr>
<tr>
<td></td>
<td>osis</td>
<td>denotes actions, conditions, or states</td>
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</tbody>
</table>

2. “sepsis” = contamination/infection; infected urine: AKA urinary tract infection
3. renal insufficiency = renal = kidney → kidneys insufficient (not functioning well)
4. hypoglycemia → too little sugar (low blood sugar)
5. blood
6. proteinuria → protein in the urine
7. IVP = intravenous pyelogram (study of the kidney system)
8. postvoid = after urination
9. leukocytes = white cells (see lab data section)
10. pneumonia
11. hypoxia = deficient oxygen
12. CT of the abdomen
13. leg below the knee (BKA)
14. yes, (INH)
15. yes, hypertrophy (enlargement)
16. no – guaiac was negative
17. **1.021**
18. yes – indwelling Foley (chronic)
19. yes – opens an organ system (urinary tract) to the environment
20. Proteus and Pseudomonas
21. B-12; IM intramuscular - into the muscle (see the discharge meds)
**ADMITTING DIAGNOSES:**
1. Bronchitis with hypoxia.
2. Reactive airway disease.
3. Enlarged thyroid.

**PROCEDURES:**
Right upper quadrant ultrasound.

**HISTORY OF PRESENT ILLNESS:** The patient is a 35-year-old male, previously in good health, who presents with a four day history of productive cough and increasing shortness of breath and fever. Denies any nausea, vomiting, or diarrhea. Also denies any weight gain, weight loss, or tremor.

**PAST MEDICAL HISTORY:** Cholecystectomy in 1989.

**SOCIAL HISTORY:** He lives with his father. Works as an accountant for the city. Denies alcohol use. Denies smoking.


**LABORATORY:** White count 8.9, hematocrit 48, platelets 123, MCV 78, RDW 12, 66 segs, 6 bands. The SMA7 remarkable for sodium of 129, alk phos 194, SGOT 53, LDH 300, bilirubin 1.4. Sputum many PMNs, many gram positive diplococci. Chest x-ray no infiltrates.

**ASSESSMENT:**
1. Early pneumonia versus bronchitis with reactive airway disease, probably Pneumococcus.
2. Enlarged thyroid gland without clinical evidence of hyper or hypothyroidism.

**HOSPITAL COURSE:** The patient was admitted to the ward and placed on IV ampicillin. The following day he was still febrile. At 7:00 p.m. on the same day Dr. McCall was called to see him because of increased shortness of breath and tachypnea. The patient improved with oxygen and Tylenol, which brought his temperature down. The following day he was noted to have wheezes throughout and he was started on Albuterol nebs (nebulizers). Liver function tests were rechecked; they were now normal except for SGOT of 43. Right upper quadrant ultrasound showed that he had a cholecystectomy in the past, but was otherwise
normal. Discharge thyroid function tests were pending, and he was 93% on room air. The patient was discharged on Albuterol inhaler and seven days of p.o. amoxicillin.

C-2 / Questions

1. The patient has a 4 day history of: ________________________________.

2. What is a productive cough?

3. The patient had surgery in the past. What was removed?

4. What are DTRs?

5. What are PMNs?

6. The patient had an enlarged thyroid gland. Did he have evidence of a thyroid problem? Yes or No?

7. What procedure was done?

8. What was the initial [oxygen] saturation?

9. Was the throat normal? Yes or No?

10. Was the thyroid normal? Yes or No?

11. Was the liver normal? Yes or No?

12. What was the SMA7 remarkable for?

13. What is sputum? _______________; and, what is its plural? ________________.

14. What organism was suspected as a cause for the RAD?

15. Why did Dr. McCall see the patient?

16. Is SGOT a liver function test? Yes or No?

17. What brought the fever down?

18. What device was used to assist the breathing problem?

19. What med was added to the device in #18?
20. How was pneumonia ruled out?

21. Were there clinical symptoms of thyroid disease? Yes or No?

22. What did the ultrasound reveal?

23. Does patient smoke? Yes or No?

24. What fluid was checked for the white count?

25. If there is a gram positive diplococci, do you think a gram negative might be possible? Yes or No?

C-2 / Answers

1. productive cough, shortness of breath and fever
2. productive cough = produces phlegm (flem)
3. gallbladder; procedure = cholecystectomy (collie-syst-ekt-o-me)
4. DTRs = deep tendon reflexes
5. PMNs = polymorphonuclear cells or “polys”
6. no; (no evidence of hyper or hypothyroidism)
7. ultrasound – right upper quadrant
8. 94% (oxygen while just breathing without any additions)
9. yes, pharynx
10. no, diffusely enlarged
11. presumably normal, not felt
12. sodium 129, alk phos 194, SGOT 53, LDH 300, bilirubin 1.4
13. sputum = products expectorated from lung; sputa (plural)
14. Pneumococcus
15. shortness of breath and tachypnea (tack-ip’knee-uh)
16. yes
17. Tylenol
18. nebulizer
19. Albuterol
20. chest x-ray (no infiltrates)
21. no
22. old cholecystectomy
23. no
24. blood
25. yes
DISCHARGE DIAGNOSIS:
1. Pneumococcal pneumonia.
2. Delirium tremens.
3. Alcoholic hepatitis.
4. Metabolic alkalosis.
5. Diabetes mellitus.

HISTORY OF PRESENT ILLNESS: The patient is a 45-year-old man admitted with shortness of breath, vomiting, and diarrhea. The patient has a history of diabetes, on no medications. Three days prior to admission the patient developed severe nausea and vomiting with epigastric pain. He had been vomiting nonstop since that time and claims that he was without diarrhea. In the emergency room the patient had profuse watery diarrhea. In addition, the patient noted cough and dyspnea with pink-colored phlegm for several days prior to admission. He adamantly denied the use of alcohol in the last two weeks prior to admission. There was no complaint of headache or earache. The patient had a hoarse voice without sore throat. There was no chest pain. He had no complaint of dysuria or joint problems. He denies myalgias. He works for the local mill doing general assistance work.

PAST MEDICAL HISTORY: Bulbar atrophy, right eye. Alcohol abuse.

ALLERGIES: No known medical allergies.

PHYSICAL EXAMINATION: The patient was anxious and tremulous. Temperature 95.2, pulse 112, respirations 28, blood pressure 106/84. The HEENT: Right corneal and scleral scarring with enophthalmos and atrophy. The lungs are clear except for mildly prolonged expiratory phase. Cardiac exam normal. The epigastrium was minimally tender. Stool guaiac negative. Neurologic exam on admission was normal except for slightly diminished DTRs (deep tendon reflexes).

ADMISSION LABORATORY: Sodium 118, potassium 1.8, chloride 55, bicarbonate 43, BUN 50, creatinine 2.3, glucose 636, anion gap 20, SGOT 94, alk phos 100, bilirubin 7.8, amylase 54. White count 13,000, hematocrit 57.2, platelets 92,000. Blood gas p02 43, pH 7.65, pCO2 46. EKG: LVH (left ventricular hypertrophy). Sputum gram stain showed numerous gram-positive diplococci.

HOSPITAL COURSE:
Problem #1) Pneumococcal pneumonia: The patient had no infiltrate on admission, but subsequently developed a left lower lobe pneumonia. He responded well to ceftizoxime therapy. He will be discharged home on twice daily Bactrim therapy to complete 3 more days.

Problem #2) Delirium tremens: The patient became profoundly agitated on the second hospital day and required intubation. Head CT was unremarkable and lumbar puncture was
unremarkable. The patient required an Ativan drip, was intubated for several days in the ICU (Intensive Care Unit). He was ultimately extubated and had complete resolution of his delirium tremens after approximately 5 or 6 days of therapy. The patient was seen in consultation by Dr. Davis from the Substance Abuse Program (SAP). He will have followup with AA (Alcoholics Anonymous) and with Dr. Davis as an outpatient.

Problem #3) Alcoholic hepatitis: The patient had pronounced hepatitis on admission, primarily with elevation of the bilirubin. An ultrasound showed no evidence of obstruction or cholecystitis. Liver function test abnormalities resolved by the time of discharge.

Problem #4) Metabolic alkalosis: The patient had pronounced metabolic alkalosis probably secondary to severe nausea and vomiting. This resolved with saline therapy.

Problem #5) Diabetes mellitus: The patient had diabetes that was completely out of control at the time of admission. This was treated with sliding scale insulin and ultimately he was switched to oral Glipizide the day prior to discharge. We will follow up his sugars as an outpatient in the clinic.

CONDITION ON DISCHARGE: Stable.

DISCHARGE MEDICATIONS:
1. Glipizide 5 mg p.o. q.a.m.
2. Clotrimazole DS one every day
3. Multivitamins one p.o. every day

C-3 / Questions

1. The patient had a Pneumococcal (new-moe-cock’uhl) pneumonia. What do you think Pneumococcal means?

2. In alcoholics, delirium ______________________ means what?

3. The human body system is either acid or alkaline. If you have metabolic alkaline state, it is called: ________________________, and if you have metabolic acid, it is called: ________________________.

4. Dyspnea (disp’knee-uh) means what?

5. The patient denied myalgias (my-al’jee-uhs). What are these?

6. Is the word tremulous similar to tremens? Yes or No? So what was the examiner seeing the patient do?
7. Around the stomach (epigastrium) was?
8. Blood test on the stool was?
9. If LVH = left ventricular hypertrophy, then what is RVH?
10. The sputum (matter ejected from the lungs) was tested with a gram stain and grew?
11. On chest x-ray on admission, did the patient have pneumonia? Yes or No?
12. The patient was intubated for feeding through a tube, but later he was?
13. Did his shakiness go away? Yes or No?
14. SAP stands for what?
15. If hep means liver, what is hepatitis?
16. Hepatitis was obvious because of elevation of what?
17. The patient had saline therapy. “Saline” = salt. Did the patient drink the salt? Yes or No?
18. As in #17, describe glucose solution administration.
19. What kind of scarring was noted on the eye exam?
20. What do you think prolonged expiratory phase means?
21. The patient required intubation. What does that involve?
22. Was a procedure done? Yes or No? If yes, list: ____________________ ; and, was it abnormal? Yes or No?
23. What probably caused the alkalosis?
24. Since the patient is a diabetic, he was on _______ and was switched to ___________________________ on discharge.

C-3 / Answers
1. Pneumococcal = Pneumococcus is an organism (bacteria)
2. tremens; shaking
3. alkalosis = metabolic alkaline state; acidosis = metabolic acid
4. dyspnea = difficulty breathing, or shortness of breath
5. myalgias = muscle pains
6. yes - shake
7. tender
8. negative (guaiac)
9. RVH = right ventricular hypertrophy (LVH = left ventricular hypertrophy)
10. gram positive diplococci (dip-low-cock-sigh)
11. no, on admission, no infiltrates, but later developed pneumonia
12. extubated (tube was removed)
13. yes
14. SAP = substance abuse program (not, by the way, a standard abbreviation)
15. hepatitis = inflammation of the liver (“hep” = liver; “itis” = inflammation)
16. bilirubin
17. no, it was given as a salt solution intravenously (IV)
18. glucose solution IV
19. right corneal and scleral
20. prolonged expiratory phase = longer period than usual for breathing out (expiration)
21. intubation = a tube was inserted into (in this case) the stomach
22. yes, ultrasound – also CT of head and lumbar puncture; no
23. nausea and vomiting
24. insulin – oral Glipizide

**C-4 / Discharge Summary**

**DIAGNOSIS:** Gallstone pancreatitis.

**PROCEDURES:** Laparoscopic cholecystectomy with intraoperative cholangiogram on 2/2/99.

**HISTORY OF PRESENT ILLNESS:** The patient is a 56-year-old woman with epigastric pain for the previous week. She had been admitted and discharged and treated with Timentin for presumed pyelonephritis. The day after discharge she returned to the hospital with emesis, not tolerating p.o. (food/liquids by mouth) and return of her abdominal pain. She was referred to me for surgical consultation. Gallbladder ultrasound revealed gallstones and thickened gallbladder wall.

At Mercy Hospital the patient had amylase of 4,800. The patient was admitted for gallstone pancreatitis, for observation for spontaneous resolution of pancreatitis, and then laparoscopic cholecystectomy.
HOSPITAL COURSE: The morning after admission the patient's amylase was 288. She underwent laparoscopic cholecystectomy with intraoperative cholangiogram. Her gallbladder and multiple stones were removed, and a normal intraoperative cholangiogram was obtained.

The patient's postoperative course has been unremarkable. She is discharged home on postoperative day #2, afebrile, tolerating a regular diet. She is to return to the surgery clinic on for staple removal.

DISCHARGE MEDICATIONS:
1. Tylenol with codeine #3, #30 dispensed, 1-2 p.o. every 4 hours as needed for pain.
2. Tylenol 325 mg, #50 dispensed, 2 every 4 hours as needed for pain.

C-4 / Questions

1. The patient had the following procedures: _____________ and _______________.
2. The *cholecystectomy* was done through a _________________________________.
3. Dissect (define) *cholangiogram*:

   |   |   
---|---|---
| a | chol |
| b | angi |
| c | o |
| d | gram |

4. The *cholangiogram* was done before, during, or after the cholecystectomy?
5. Patient had *pyelonephritis* (pie’ello-nihf-reye’tis); if *pyelo* is renal pelvis and *neph* is kidney, what is this problem?
6. What does *p.o.* stand for?
7. What does *n.p.o.* stand for?
8. Amylase (am’il-ace) is a study performed from what source?
9. Did the amylase drop? Yes or No? What significance does that have?
10. The skin was closed with __________________________ at the surgical procedure.
11. How many Tylenol #3 were dispensed?

12. Were stones present? Yes or No?

13. What is emesis?

14. Was an ultrasound done? Yes or No?

15. Pancreatitis is an inflammation/infection of what?

16. What were the discharge dietary instructions?

17. Were the discharge drugs given to the patient or prescribed?

18. What had she taken the drug, Timentin, for?

**C-4 / Answers**

1. laparoscopic cholecystectomy (“surgical removal of the gallbladder”) and intraoperative cholangiogram (“a serial set of x-rays with contrast material injected”)
2. laparoscope
3. cholangiogram → (a) “chol” = bile or bile ducts; (b) “angio” = of or relating to vessels; (c) “o” = combining letter; (d) “gram” = drawn, written or recorded → a serial set of x-rays with contrast material injected
4. after = after the operation, that is after the cholecystectomy part (also would be OK as intra=during, meaning the whole operation).
5. infection of the kidney system (note: “neph” = also kidney)
6. “p.o.” = per oral (by mouth)
7. “n.p.o.” = nothing per oral (nothing by mouth)
8. blood or urine – in this case, blood
9. yes, from 4800 to 288, meaning her critical problem was resolving
10. staples (see staple removal)
11. 30
12. yes – mentioned a couple of times (see also diagnosis)
13. emesis = vomiting
14. yes
15. pancreas (“pancreatitis” = inflammation/infection of the pancreas)
16. regular (nothing special just an ordinary diet)
17. dispensed
18. pyelonephritis (“inflammation of the renal pelvis and kidney, usually as a result of infection)
C-5 / Discharge Summary

DISCHARGE DIAGNOSES:
1. Upper gastrointestinal bleed.
2. Jejunal varices.
3. Protein C deficiency.

PROCEDURES:  
Transfusion of packed RBCs.

HISTORY OF PRESENT ILLNESS:  
This is a 59-year-old female complaining of feeling weak with heart palpitations and headache starting the night before admission. The patient is well known to this hospital with a very complex medical history including diabetes mellitus, protein C deficiency with recurrent thrombotic events, recent DVTs (deep venous thromboses), splenic vein thrombosis and mesenteric vein thrombosis. As a consequence of these events, the patient had been left with jejunal varices and suffers from recurrent GI (gastrointestinal) bleeds. Earlier this month she had recurrence of deep venous thrombosis in her right leg that seemed to follow an arteriography procedure in that same extremity. Because of her history of GI bleeds and concern over maintaining her in an anticoagulative state, she was flown to The Specialty Center where she had a Greenfield filter placed in her vena cava. She was transferred back here on heparin without evidence of bleeding. Because of her propensity to bleed intestinaly, she was sent home on prophylactic doses of low molecular weight heparin subcutaneously b.i.d. (Lovenox). Her discharge was on the 12th of January.

The patient did well initially until the day before admission when she began feeling very weak, noted her heart to be palpitating hard. She had noted her stools being more black over the last few days, however, she does take iron on a chronic basis.

PAST MEDICAL HISTORY:  
See previous admissions. The patient is diabetic on oral agents. She has a history of hypertension. She has recurrent DVT of her right lower extremity both in 1988 and 1985, and again as noted in 1998. She had a positive PPD. She has known jejunal varices and recurrent GI bleeds. She is status post multiple abdominal surgeries including cholecystectomy, hernia repair, C-section x3, oophorectomy, appendectomy, and tubal ligation. She is felt to be a very poor operative candidate for any diverting procedure of her jejunal varices.

ALLERGIES:  
No known medical allergies.

MEDICATIONS:  
Diabinese 500 mg q.a.m., Metformin 500 mg with each meal, Inderal 400 mg b.i.d., iron sulfate 325 mg t.i.d., Lovenox 30 mg b.i.d. subcutaneous (subcutaneously).

PHYSICAL EXAMINATION:  
On admission revealed a pale, weak-appearing female in mild
distress. Temperature 98.6, pulse 80, respirations, 20, blood pressure 100/60 lying, 80/50 standing. Head and neck: Neck is supple. There were no nodes palpable. The carotids are 2+ bilaterally. The PERRLA (pupils equal, round, reactive to light and accommodation). EOMs (extraocular movements are intact). Ears are normal. Throat is dry. Chest: Clear to auscultation and percussion. Heart: Regular rate and rhythm. No gallops or rubs are heard. Abdomen: Multiple surgical scars, soft, flat, and nontender. Extremities: The right leg is slightly larger than the left. There is mild edema of the right calf and ankle. Homan's sign negative. There is no redness or tenderness, and no tense swelling. Rectal: Black, guaiac positive stools noted.

LABORATORY DATA: Glucose 573, BUN 33, creatinine 0.7, sodium 137, potassium 5.0, chloride 109, CO2 20. White blood count 8,700, hemoglobin 7.9, hematocrit 25. MCV 84. Platelets 287,000. Pro time 12.6, INR 1.2, PTT 26.

HOSPITAL COURSE: On admission the patient was felt to have diabetes with severe hyperglycemia, gastrointestinal bleed, hypovolemia and anemia, jejunal varices, and known protein C deficiency. She was given IV fluids, blood transfusions and sliding scale to correct her high glucose. The patient's blood pressure improved, however, after two units of blood her hematocrit 24 hours later was still 24% indicating that she was continuing to bleed.

Over the course of the next 24 hours the patient received three more units of blood and her hematocrit still remained at 26. Because it was felt she may need surgical intervention, it was elected to transfer the patient back to her gastroenterologist in The Specialty Center.

DISPOSITION: The patient is transferred to the care of The Specialty Center. She is transferred with IV fluid running and in stable condition.

C-5 / Questions

1. *Jejunal* (jay-june-uhl) is an adjective for what noun?

2. What is the singular of *varices* (vare-iss-ees)?

3. What does the answer in #2 mean?

4. *RBCs* are what?

5. *DVTs* are what?

6. What would *anticoagulation* do?

7. A filter was placed in the *vena cava* (veena cave-a) for what purpose?
8.  *B.i.d.* means what?

9.  Black stools might be present if one takes iron; however, what is the other possibility?

10. Did the patient ultimately have *melena*? Yes or No?

11. *C-section* stands for what procedure?

12. What is an *oophorectomy* (*oo‘for-ek’tuh-me*)?

13. What is *t.i.d.*?

14. What is *PERRLA* (*purr‘luh*)?

15. What is *pro time*?

16. After 5 units of transfused blood, the patient's hematocrit was ________, which meant that she continued to __________________________.

17. A previous vessel study was done called an: __________________________

18. How many surgeries had the patient had in the past?

19. Blood pressures change from lying to sitting to standing. List this patient’s lying systolic ________, diastolic ________; standing systolic _________________diastolic ________________

20. In a patient with *DVT*, would leg size make a difference? Yes or No?. Why?

21. *Hypovolemia* is?

22. How many total units were transfused?

23. What was condition on discharge?

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**C-5 / Answers**

1.  *jejunum* (noun; “the middle portion of the small intestine”) – *jejunal* (adjective)
2.  *varix* (singular) – *varices* (plural)
3.  *enlarged/twisted blood vessel.*
4.  *RBCs* = red blood cells
5.  *DVTs* = deep vein thromboses (*throm-bose-sees*)
6. anticoagulation takes away the coagulating blood; e.g., get rid of the thrombosis (plural = thromboses)
7. to filter the blood and keep clots from moving through.
8. b.i.d. = twice a day
9. blood from the upper GI system moving through the digestive process called “melena” (mell-in-uh)
10. yes
11. C-section = caesarean section
12. surgical removal of 1 or both ovaries.
13. t.i.d. = three times a day
14. PERRLA = pupils equal, round, reactive to light and accommodation
15. pro time = prothrombin time or PT
16. 26% and bleed
17. arteriography
18. 8
19. 100/60, 80/50
20. yes, the vessel in the leg involved would create swelling in that leg
21. hypovolemia = low volume — in this case, blood
22. 5
23. stable

**C-6 / Discharge Summary**

**DISCHARGE DIAGNOSES:**

1. Asthma, acute exacerbation.
2. Hypokalemia.
3. Severe hypoxemia with C02 retention.

**HISTORY OF PRESENT ILLNESS:** This is a 71-year-old female complaining of increased SOB (shortness of breath) and wheezing. This is the 13th admission for this patient to ABC Medical Center who is well known to the Internal Medicine Service with a history of severe asthma dating back to 1985 associated with chronic obstructive pulmonary disease. The patient was last hospitalized here November 11, 1998 through November 11, 1998 for exacerbation of her asthma and a right middle lobe pneumonia. Since discharge she has been seen in the emergency room on December 12, 1998 and January 1999 for acute exacerbation of her asthma. She was treated in the emergency room with steroids and nebulizations and sent home. The patient has chronic hypoxemia and uses oxygen at home. She has had home nebulizations as well. The patient states that since discharge from the emergency room on January 19, 1999, she never really cleared. She returned because of worsening of her shortness of breath and inability to get air. She has been taking her medications at home and using her oxygen most of the time. She denies nausea, vomiting, diarrhea, or chest pain.
PAST MEDICAL HISTORY: The patient has had multiple hospitalizations for chronic asthma exacerbation. She takes steroids intermittently. She had one episode of sudden LOC (loss of consciousness) secondary to hypoxia. Echocardiogram has demonstrated LVH (left ventricular hypertrophy) with mild mitral regurgitation. She has had a normal EEG. PFTs have shown restrictive defects. She was diagnosed with B-12 deficiency in 1995.


CURRENT MEDICATIONS: Albuterol by MDI (metered dose inhaler) and nebulizations at home, intermittent prednisone, Theo-Dur 200 mg t.i.d., intermittent antibiotics.

PHYSICAL EXAMINATION: On admission revealed an obese, elderly female in moderate respiratory distress. Temperature 100.3, pulse 93, respiratory rate 36, blood pressure 149/63, O2 saturation on one liter 83%. Head and neck examination: Pupils equal, round, reactive to light and accommodation. Ears showed normal drums. Mouth: The patient is edentulous. The throat is normal. Carotids are palpated bilaterally. There is no neck stiffness. No nodes are palpable. The trachea is midline. Heart: Decreased heart sounds. No gallop. There is a grade II/VI systolic murmur at the left lower sternal border. There is no jugular venous distention. The abdomen is soft, round, and nontender. No masses are palpable. Extremities: No clubbing, cyanosis, or edema. The pulses are felt. Neurologic: No focal findings.


HOSPITAL COURSE: On admission the patient was felt to have another acute exacerbation of her asthma. She was placed on an every four hour nebulizations and 60 mg prednisone daily. Her other medications were continued. She was also given potassium supplementation. Follow-up potassium showed correction to normal levels. With this regimen the patient slowly improved.

DISPOSITION: The patient is discharged home with a follow-up appointment in two weeks time to see Dr. Davis. She will maintain herself on home oxygen therapy. Her diet is as tolerated. Activity as tolerated.

DISCHARGE MEDICATIONS:

1. Prednisone 20 mg t.i.d. x 4 days, then 40 mg a day for 4 days, then 20 mg a day for a week until her appointment.
2. Theo-Dur 200 mg q 8 hours.
3. Bactrim DS 1 b.i.d. x 5 more days.
4. Albuterol MDI (metered dose inhaler) at home q.i.d.
1. The patient has asthma with an acute *exacerbation* (ex-ass’er-bay’shun). What is that (English word)? (it’s *not* exasperation, by the way)

2. What is an *EEG*?

3. Is an *EEG* the same as an *EKG*? Yes or No?

4. *Carotids* (car-ott’ids) are in the neck. What are they?

5. There is a *grade III/IV* systolic murmur: True / False

6. Why is there *scarring* in the left lower lobe?

7. *q.* means what?

8. The patient was potassium deficient. Did this problem get corrected? Yes or No?

9. One of the discharge meds was *prednisone* (pred-niz-own). Was the dosage constant? Yes or No?

10. What is *SOB*?

11. Describe *hypoxemia*?

12. Does she have chest pain? Yes or No?

13. Did the hypoxemia ever cause her neurological problems? Yes or No?

14. She had had a *Gyn* surgery, which was?

15. She had an *O₂* saturation of 83%, despite being on 1 liter of: _______________

16. If “e” as a prefix also means without (remember “a”), then what does *edentulous* mean?

17. Were her potassium levels normal? Yes or No?

18. How much activity was she supposed to undertake on discharge?

19. How many more days was she to take Bactrum?

20. What does *MDI* stand for?
C-6 / Answers

1. acute exacerbation = increase or worsening in the seriousness of the disorder
2. EEG = electroencephalogram (elektro-enceffalow-gram).
3. no -- but sometimes they sound alike, so listen or check carefully
4. carotids = blood vessels; these are the ones you feel to detect the pulse; there may be bruits present (brew-eez) or other blood flow sounds
5. false (II/VI) you will see these used as Arabic numbers too, 2/6, however, Roman numerals preferred
6. from previous pneumonia
7. q. → every (q. 4 h = every 4 hours).
8. yes
9. no -- it was a tapering dose, which is typical of steroids (steer-oyds)
10. SOB = shortness of breath
11. hypoxemia = too little oxygen
12. no
13. yes, she had loss of consciousness
14. removal of an ovarian tumor
15. oxygen (implied)
16. edentulous = without any teeth
17. no --- initially she had potassium supplements, then normalized
18. as tolerated
19. 5
20. MDI = metered dose inhaler

C-7 / Discharge Summary

FINAL DIAGNOSES:
1. Somewhat atypical pneumonia.
2. Increased intracranial pressure of unknown etiology.
3. Hypertension.

PROCEDURES:
1. CT scan of the head.
2. Lumbar puncture.

HISTORY OF PRESENT ILLNESS: This was the second admission for this 46-year-old diabetic female who presented to the internal medicine clinic complaining of a six week history of bilateral leg pain which was neuropathic in nature. She had been seen the day prior to admission in the walk-in clinic complaining of leg pain and a temperature of 101.9 degrees. She said she and been vomiting for the previous 24 hours prior to admission and had had some abdominal pain of a muscular type. She also complained of generalized malaise, feeling terrible,
unable to sleep and total body aches.

**PAST MEDICAL HISTORY:** She had a hysterectomy in the past. Medications: insulin 25 units of NPH in the morning, 20 in the evening, Lisinopril 20 mg a day, levostatin 20 mg q.h.s., and lodapine 10 mg q.a.m., Tylenol p.r.n.

**SOCIAL HISTORY:** She does not smoke or drink.

**PHYSICAL EXAMINATION:** Showed a well-developed, well-nourished female. Temperature was 99.6 degrees, respirations 24. The HEENT: Were unremarkable. Heart sounds were normal. There was no murmur or gallop. Chest was clear. Abdomen, liver, spleen and kidneys were not palpable. Extremities: No cyanosis, clubbing or edema. There was pain to very light touch and sensation that her skin was burning on both legs.

**LABORATORY DATA:** White count was 9000, hematocrit 41, SMA 7 showed a glucose of 403, creatinine 0.8, SGOT 40, bilirubin 0.8, amylase 28.

**HOSPITAL COURSE:** The patient was admitted to the floor and treated with IV fluids. That evening she had a temperature up to 103 degrees and was started on cephazolin after cultures were obtained. She complained of headache in the frontal area. Her neck was supple. Her CBC was normal. SMA12 was normal and urine grew out 10 to the 50th E coliforms. Chest x-ray showed bibasilar infiltrates. Because of the headache and fever, CT scan that was obtained which was unremarkable, an LP was performed which showed an opening pressure of 30 cm. There were 6 red cells, 2 lymphocytes, no polys; glucose was 76 and protein 58.

Because of the increased intracranial pressure, the severe headache, fever, and atypical pneumonia, it was thought that the patient should be transferred to the University Hospital for multiple subspecialty evaluation. This was accomplished and the patient was transferred there.

Addendum: At the UNMC Hospital, no specific diagnosis was obtained. Repeat CT scan was normal and the patient was discharged after her headache went away.

**C-7 / Questions**

1. Patient had what kind of pneumonia?
2. What was the patient’s main complaint in the clinic?
3. Were the vital signs all done?
4. Was the patient afebrile in the hospital?
5. Did the chest x-ray show any pathology? Yes or No? If so, what was it?
6. What does bibasilar mean?
7. LP stands for?
8. Were there polys on the lab (CBC)? Yes or No?
9. What surgery had the patient undergone in the past?
10. Intracranial means?
11. What procedures were done? ______________________ and _____________________
12. Is the patient diabetic? Yes or No? How do you know?
13. What is cyanosis (sigh-an-ose-iss)?
14. Would it really be possible to have pain to light touch? Yes or No?
15. What was the blood glucose reading?
16. Did the urine grow any pathogens? Yes or No?
17. Was there something about pressure on the lumbar puncture? Yes or No? What is the significance of that?
18. Do some of the lab results on the LP look similar to those you have seen on the blood? What are they?

C-7 / Answers

1. atypical
2. bilateral leg pain
3. no, they generally include temperature, respirations, blood pressure, heart rate, and sometimes height and weight. In this report, we have only temperature and respirations.
4. no -- “afebrile” means without fever; temperature was 103
5. yes, bibasilar infiltrates
6. bibasilar = two -- both bases of the lung
7. LP = lumbar puncture
8. no
9. hysterectomy
10. intracranial = into the head
11. CT scan and lumbar puncture
12. yes – mentions she is on insulin, and her blood sugar (lab) is 403 [high] and in the PI, it says she is diabetic.
13. cyanosis = a bluish skin discoloration due to excessive concentration of reduced hemoglobin in the blood – pulmonary cyanosis is a sign of low oxygen
14. yes — neurologic disorders; note, her burning legs
15. 403
16. yes — E. coli (short form of Escherichia coliform – family of bacteria)
17. yes -- the opening pressure denotes the intracranial pressure
18. yes — all of them listed after the LP on the lab data

C-8 / Discharge Summary

HISTORY OF PRESENT ILLNESS: The patient is a 7-week-old who was admitted for a rule out sepsis. The patient was doing well until the day of admission when he developed a non-bloody, watery diarrhea and tactile fever, no vomiting, no upper respiratory symptoms. He was drinking formula well. He was brought to the ER and his temp was noted to be 101 degrees. Stool was sent for culture. His stool had moderate phacoleukocytes. The UA with a normal specific gravity, occasional white blood cell clumps, no white blood cells, no red blood cells. Urine culture was sent and CBC had white blood cell count of 12.9, 32 segs, 7 bands, 53 lymphs, 8 monos. Blood culture was sent. SMA7 was within normal limits.

PAST MEDICAL HISTORY: He had an admission for rule out sepsis and was kept in the nursery for respiratory distress and birth depression. No known allergies. Immunizations up to date. Normal development for age.

FAMILY HISTORY: Without any particular family diseases. He lives in Lupton.

PHYSICAL EXAMINATION: Temperature 100.4 degrees, respiratory rate of 64, blood pressure 96/44, weight 6.8 kilos for 50th percentile. Height 60 cm for 90th percentile. Head circumference 38.5 for 50th percentile. Physical exam was normal at admission and unremarkable.

HOSPITAL COURSE: He was admitted after chest x-ray was done which showed no infiltrates. He was admitted for severe diarrhea, possibly Shigella, but he also had a red spot on the forehead, which brought up the possibility of herpes infection. He was started on ceftriaxone for the rule out sepsis and possible Shigella and he was also started on Ceclor. Spinal tap was done at the time of admission as part of the regular workup. The spinal fluid had a white blood cell count of 675 with 650 red blood cells, 68 lymphs, 32 polys, glucose 44, protein 91.

The patient did very well during the admission. The next day the spinal culture was reported as negative. The other cultures were still pending. He was afebrile and doing much better at that
point. During the second day of admission it was noted he had a heart murmur. Some studies were done including an EKG, which was normal. He had no other complications related to that mild murmur. The patient did very well. Consult was done due to the possibility of herpes. After consulting, we were recommended to keep him under observation; the possibility of herpes at that age was described as low. Due to the hospital course and lab findings it doesn't look like he had herpes.

We discontinued all the medication. He was observed for 24 hours after discontinuing the medications. He did very well. All cultures were reported as negative including blood, urine and spinal cultures. He gained weight, was very active all around and was comfortable.

He was to have another appointment for follow-up on his heart murmur. He was discharged in stable condition.

C-8 / Questions

1. What were the concerns about this patient?
2. Were the suspicions ruled out? Yes or No?
3. His growth rate was apparently normal. Weight was _______, height __________ and the head circumferences showed him to be in the ___________ for growth.
4. What was the result of the cultures?
5. From where were the cultures obtained?
6. Why is Shigella capitalized?
7. What is Shigellosis?
8. What did they do when they discovered a heart murmur?
9. Was the murmur significant? Yes or No?
10. Was herpes present? Yes or No?
11. How was it determined initially the patient had a fever?
12. Did the patient have pneumonia? Yes or No?
13. Is a spinal tap the same thing as a lumbar puncture? Yes or No?
14. Did any of the cultures grow out pathogens? Yes or No?

15. A condition of having phakoleukocytes present is?

16. Why was the baby kept extra time in the nursery following birth?

17. What do you think birth depression means?

18. It looks as if height is normal, what about weight?

**C-8 / Answers**

1. elevated temperature, suspecting sepsis, severe diarrhea - possibly Shigella, and the suspicion of herpes.

2. yes

3. 6.8 kilos, 60 cm, 50\(^{th}\) percentile

4. negative

5. spinal fluid; urine; blood

6. it is a proper noun

7. Shigellosis = the condition of having Shigella

8. an EKG

9. no

10. no

11. tactile – touch

12. no

13. yes

14. no

15. phakoleukocytosis (fake-oh-luke-oh-sight-osis) – adding the “osis” – condition of

16. rule out sepsis, respiratory distress and birth depression

17. birth depression -- Apgar scores might not have been too good, plus the respiratory distress

18. 50\(^{th}\) percentile is low, particularly since height is in the 90\(^{th}\)
FINAL DIAGNOSES:
1. Chest pain, possible angina.
2. Rheumatic heart disease with mitral regurgitation.

HISTORY OF PRESENT ILLNESS: This was the third admission for this 71- year-old man with known rheumatic heart disease and diabetes who presented to the clinic complaining of chest, epigastric and left arm pain, starting the day prior to admission. The patient has a long history of rheumatic heart disease, had a treadmill stress Echo done on September 22, 1997. At that time, he showed severe mitral regurgitation, exercise-induced pulmonary hypertension and was started on Lisinopril and amlodipine. Since that time, the patient says he had decreased exercise tolerance.

PAST MEDICAL HISTORY: Significant for an old thoracoplasty for tuberculosis. He had a cholecystectomy and has been hospitalized for a viral syndrome in 1987. Medications: Amlodipine 10 mg q.a.m. and Lisinopril 10 mg q.a.m. He has stopped taking aspirin, persantine and digoxin.

PHYSICAL EXAMINATION: Showed a chronically ill, thin male, who was in no acute distress. Blood pressure was 109/68. The HEENT: Were unremarkable. Heart: Regular rhythm, grade III-IV/VI holosystolic murmur at the left apex with sustained left ventricular impulse in the left anterior axillary line. There were bibasilar crackles in the chest. Abdomen: Patient had some mild epigastric tenderness without guarding or rebound. Stool was guaiac negative. Extremities: no cyanosis, clubbing or edema.

LABORATORY DATA: SMA-12 was unremarkable, glucose 112, bilirubin 1.0, CPK 52, white count normal, hematocrit 36, PT and PTT were normal. Electrocardiogram showed atrial fibrillation with nonspecific ST-T abnormalities.

IMPRESSION:
1. Patient was admitted to ICU with chest pain and epigastric pain thought to be possibly cardiac ischemia and possibly GI in origin.
2. He had known rheumatic heart disease with severe mitral regurgitation and atrial fibrillation. This was chronic and the patient had not been anticoagulated in the past due to poor compliance.
3. He had a history of diabetes.

HOSPITAL COURSE: The patient was admitted and treated with heparin, aspirin, lasix and digoxin. His rate was well controlled and his heart failure was then compensated. He was then transferred to the ABC Hospital for cardiac cath.

Note: addendum (from referring hospital) Cardiac cath showed normal coronary arteries and wide open mitral regurgitation. Patient is currently hospitalized awaiting mitral valve surgery.
C-9 / Questions

1. Why was the patient admitted?
2. The symptoms in #1 are suggestive of: ____________________.
3. His heart disease essentially came from a history of: ____________________.
4. What do you think echo is short for?
5. What did the echo show (9-22-97)?
6. What past surgery did he have?
7. Did he have a murmur? ____________________; if so, describe it: ________________.
8. Where was the murmur?
9. Were there any abnormalities on exam of the chest? Yes or No?; if so, what were they?
10. Was there blood in the stool? Yes or No?
11. Was the EKG normal? Yes or No?. What were the findings?
12. The chest pain was thought to be __________ in origin, or possibly ______________.
13. What is anticoagulation?
14. Was the diabetes an issue on this admission? Yes or No?
15. Had the patient had heart failure? Yes or No?
16. What was the plan?
17. Does the heart condition limit his ability to exercise? Yes or No?
18. Did the patient ever have TB? Yes or No?
19. How was the patient treated for #18? How is that defined?
20. Was the patient obese? Yes or No?
21. Were any of the lab studies abnormal? Yes or No?

22. What is ischemia?

23. What is poor compliance?

24. The referring hospital found ________________, requiring ________________.

C-9 / Answers

1. chest, epigastric and left arm pain
2. a heart problem, possible myocardial infarction
3. rheumatic heart disease
4. “echo” is short for “echocardiogram”
5. mitral regurgitation (severe), and pulmonary hypertension
6. thoracoplasty (thore-uh-ho-plasty) and cholecystectomy
7. yes, grade III-IV/VI holosystolic
8. left apex
9. yes; bibasilar crackles
10. no -- on rectal, stool was guaiac negative
11. no; atrial fibrillation and nonspecific T-wave abnormalities
12. cardiac ischemia or GI (gastrointestinal)
13. anticoagulation = thinning the blood so clots don’t form
14. no
15. yes
16. to be transferred for cardiac catheterization
17. yes
18. yes
19. thoracoplasty — surgical removal of ribs (to get at lung and allow chest wall to collapse over a diseased lung)
20. no — thin
21. yes — abnormal EKG
22. ischemia = ischein — to suppress — hem — blood — deficiency of blood due to obstruction or constriction of a vessel
23. poor compliance = a patient who fails to follow instructions (primarily taking medications)
24. wide open mitral regurgitation — mitral valve surgery
C-10 / Discharge Summary

DIAGNOSES:
1. Abdominal pain, unknown etiology.
2. Gastro-omental thickening of unknown significance.

PROCEDURES:
CAT pelvis October 5, 1999.

HISTORY OF PRESENT ILLNESS:
The patient is a 70-year-old woman with three weeks of abdominal pain that has become constant. Constipation and daily clean-outs are reported.

PAST MEDICAL HISTORY:
Significant for osteoarthritis, iron deficiency anemia.

PHYSICAL EXAMINATION:
Significant for left lower quadrant mild tenderness.

LABORATORY DATA:
No significant laboratory abnormality.

IMPRESSION:
Patient was admitted with a diagnosis of uncomplicated diverticulitis.

HOSPITAL COURSE:
On the day after admission, patient underwent computer tomography, which showed gastrocolic fullness, otherwise normal and consistent with diverticulitis. Patient was comfortable, without pain, and family preferred taking her home and coming back for outpatient EGD (esophagogastroduodenoscopy), and colonoscopy. Patient discharged home with family, with Tylenol 400 t.i.d., metamucil 1 tsp p.o. q.a.m. and Tylenol 325 dispensed every 4 hours as needed for pain. She is to return to the Endoscopy Suite October 9, 1999.

ADDENDUM:
Endoscopy performed October 9, 1999 revealed gastritis and diverticulosis. There was a small hiatal hernia, mild gastritis in duodenum. On colonoscopy, diverticulosis without intraluminal filling defects or mucosal abnormality seen.

C-10 / Questions

1. Why is gastro-omental is hyphenated?
2. The patient had a __________________________ of the pelvis.

3. What was the *chief complaint*?

4. What was found on the *CAT* scan?

5. What does the *-itis* mean on *diverticulitis*?

6. What does *EGD* stand for?

7. What are the root words for #6 – (“EGD”)?

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8. What were the *discharge medications*?

9. What was found on the *endoscopy*?

10. What was found on the *colonoscopy*?

11. What kind of *anemia* is involved?

12. What is the abbreviation for *left lower quadrant*?

13. What does *CAT* stand for?

14. Are *CT* and *CAT* the same thing?

15. What was the dosage for, and how often was the patient to take Metamucil?

16. Was a hernia ever noted?

17. Were mucosal abnormalities noted on EGD?

18. What is a *colonoscopy*?

19. What is *diverticulitis*?

20. Describe the phonetic sound of #19: _________________________________
C-10 / Answers

1. the rule is when a word is combined using a vowel (which is the same letter as the second root), use a hyphen to separate double vowels – intra-abdominal, salpingo-oophorectomy, etc.

2. CAT scan

3. abdominal pain

4. gastrocolic fullness, otherwise consistent with diverticulitis

5. “itis” = inflammation or infection of a diverticulum

6. EGD = esophagastroduodenoscopy

7. (a) esophagus; (b) gastrium; (c) duodenum

8. Tylenol, Metamucil

9. hiatal hernia, gastritis, diverticulosis

10. diverticulosis

11. iron deficiency

12. LLQ = left lower quadrant

13. CAT = computerized axial tomography

14. yes

15. 1 teaspoon by mouth every morning

16. yes – on EGD

17. no

18. colonoscopy = a scopic exam of the colon

19. diverticulitis = inflammation of a diverticulum

20. dye – vur – tick’ – u – litis

C-11 / Discharge Summary

DIAGNOSES:
1. Viral syndrome with back pain.
2. Uncontrolled diabetes mellitus.
3. Hypothyroidism.
4. Depression.
5. Refractory monilial vaginitis.
DISCHARGE MEDICATIONS:
1. Keflex 500 mg t.i.d.
2. Fluconazole 200 mg x1
3. Prozac 20 mg q.a.m.
4. Synthroid 0.175 mg q.a.m.
5. NPH insulin 60 units subcutaneous q.a.m., 40 units subcutaneous at 9:00 p.m., prelunch regular insulin and predinner regular insulin.

DISPOSITION:
I will see the patient in 1 week.

HISTORY OF PRESENT ILLNESS:
This 49-year-old female diabetic has been admitted almost every 2 months for pyelonephritis and now presents with low back pain. The patient has had no fever, chills, rigors, but has had sweats. She has been able to eat without nausea, vomiting, diarrhea, and constipation. She denies dysuria, vaginal discharge, pelvic or abdominal pain.

The patient does not feel she needs to be admitted at this time. She also feels her pain is very different than that with pyelonephritis.

PAST MEDICAL HISTORY:
Positive for (1) refractory, uncontrolled diabetes with hemoglobin AIC greater than 14 despite multiple different insulin regimens. Patient is noncompliant with diet and in denial. Currently she is on NPH insulin 16 at subcutaneous q.a.m., regular insulin 10 units prelunch, regular insulin 10 units predinner and NPH insulin 40 units subcutaneous q.p.m. (2) Depression, much better on Prozac. (3) Hypothyroidism on Synthroid 0.175 mg. (4) GERD with nightly shortness of breath controlled with Maalox and Benadryl. (5) Constant monilial infection. (6) Recurrent UTIs on ciprofloxacin 250 mg q.h.s.

PHYSICAL EXAMINATION:
The patient looks OK. She is not toxic. Her temperature is 97.5 degrees, her blood pressure is 100/60, heart 100, respirations 16. Skin is negative. The HEENT is negative. Sinus negative. CVA tenderness but much lower than the CVA point. Abdomen: negative. Pelvic: she has a bad monilia infection and her guaiac is negative.

LABORATORY DATA:
Includes a normal CBC with a white count of only 7,100 and a normal hematocrit. Electrolytes are totally normal; BUN and creatinine normal. Blood sugar is 348. Her blood cultures are negative. Her urine was loaded with white blood cells and 10 RBCs. Her urine culture grew only 10 to 50,000 mixed flora.

HOSPITAL COURSE:
The patient was admitted with a possible UTI, maybe early pyelonephritis. Her urine looked diagnostic but she also had the chronic terrible monilia infection that probably produces a lot of
white cells. Her urine actually grew only 10 to 50,000 white blood cells. The patient had a normal CBC and never had a temperature greater than 98.6 degrees in the hospital. While she was in the hospital, she did develop a sore throat and kind of a mild cough. It was felt she was probably having a viral syndrome, even Strep throat and that was the cause of some of her myalgias and back pain. She did have a renal echo in the hospital that was negative. She felt fine after a little hydration.

C-11 / Questions

1. What was the patient’s presenting problem?
2. She had no dysuria. Describe what that means?
3. She had a bad ___________________________ infection.
4. UTI stands for what?
5. Just for comparison, what does URI stand for?
6. See why you have to listen carefully when abbreviations are used?
7. What cultures were done? ___________________________ and ___________________________
8. Does she have a fever? How about high blood pressure?
9. A test for checking blood in the stool is called?
10. Did they do a culture for Strep throat?
11. Was the patient’s hyperthyroidism treated?
12. Why is the diabetes refractory?
13. Can you see any difference in the type of insulin used? If so, what is it?
14. Can you guess what GERD is?
15. Was the guaiac test done on the vagina?
16. Do you think a blood sugar of 348 is: Normal / High
17. What would be the significance of urine loaded with white blood cells?
18. The urine grew 10 – 50,000 which is incorrectly transcribed. Can you guess what it should say?

19. She felt better after a little hydration:
   (a) What is hydration?
   (b) How was it provided?

**C-11 / Answers**

1. low back pain
2. dysuria = “dys” = malfunction; “uria” = urine
3. monilial
4. UTI = urinary tract infection
5. URI = upper respiratory tract
6. yes, you do
7. blood and urine
8. no (97.5 (actually below normal which is 98.6) and, no, blood pressure is low 100/60
9. guaiac
10. no, none was mentioned
11. no hyperthyroidism – she was hypothyroid – did we catch you napping?
12. blood sugars remain out of control despite insulin (though the patient is not very compliant)
13. NPH and regular
14. GERD = gastroesophageal reflux disease
15. no – it is always done on the rectum or rectal vault – a typical example of a dictator’s inability to always say things correctly
16. high – normal is around 100
17. white blood cells always increase with an infectious process
18. 10,000 to 50,000 (see #15)
19. (a) hydration = water; (b) IV (we know it doesn’t say that, but nonetheless, it’s true)

**C-12 / Discharge Summary**

**HISTORY OF PRESENT ILLNESS:**
This was the 2nd admission for this 22-year-old man who presented at Lafayette Hospital on 10-29 with pneumonia. There, he was noted to have a drop in his blood pressure and hypoxia and was transferred to our hospital for an ICU bed. The patient had been treated the day before with oral penicillin for a presumed pharyngitis. Patient was unable to produce sputum at Lafayette.

**PAST MEDICAL HISTORY:**
Patient was admitted here in 1998 for a right parotidectomy. He admitted to occasional alcohol abuse, but had none recently. He had no HIV risk factors and was taking no medications.

**PHYSICAL EXAMINATION:**
Showed an acutely ill, alert man, with a heart rate of 135, respiratory rate of 40, blood pressure of 95/68. The HEENT: Unremarkable. Chest was clear, heart sounds were normal. Abdomen was negative.

**LABORATORY DATA:**
Blood gases on 100% rebreather showed a pH of 7.26, pCO2 of 28, and pO2 of 73. Chest x-ray showed a dense right upper lobe infiltrate. White blood count at Lafayette had been 31,800. His creatinine was 1.3 and bilirubin 0.9.

**HOSPITAL COURSE:**
Patient was admitted to the Intensive Care Unit and treated with IV ceftizoxime and erythromycin. Follow-up laboratory showed that his white count was 26,700, albumin 2.5, LFTs normal and creatinine 1.3. Patient had a slow, steady course with continued improvement. He did not require intubation or ventilation and after four days, was feeling well. Patient developed a nosebleed, but this finally stopped spontaneously and did not require packing. On the fourth hospital day, the patient signed out AMA. Prior to this time, he had been seen by a mental health worker because of what was thought to be rather inappropriate or immature complaints. The diagnosis was that of an adjustment disorder with mixed emotional features.

At the time of discharge, the patient was alert, cooperative and able to understand his situation. He agreed to take oral medications and have follow-up at Lafayette although refused to stay here as an inpatient any longer. At the time of his discharge, he was afebrile. He had scattered crackles in the lungs; heart sounds were normal. White blood count was 12,800, hematocrit 42, creatinine 0.7, bilirubin 0.7 and his SMA-12 was normal. Chest x-ray did show clearing of his infiltrate.

A bacteriological diagnosis was never obtained. His blood cultures were negative as was sputum. X-ray had initially shown involvement of multiple lobes, but follow-up x-ray showed marked improvement.

Patient was then discharged AMA (Against Medical Advice). Discharge medication was amoxicillin 500 mg t.i.d. for 10 days. Patient was to follow up at Lafayette in two days.

**C-12 / Questions**

1. Patient had had surgery in the past, a ____________, which is removal of the __________.

2. Based on all of the reports you have reviewed, was the respiratory rate normal? Why or
why not?

3. What did the chest x-ray reveal?

4. Based on #3, what do you think the working diagnosis was?

5. The white count was somewhat elevated. Do you think, based on all of the reports you have now read, that such an elevation would signify an infectious process? Yes or No?

6. Patient was given antibiotics which were: ____________________________

7. Did he require intubation or ventilation for the pneumonia?

8. What happened to his white blood count when he started to improve?

9. Did he have a fever? Yes or No? If so, what was it?

10. What do you think a bacteriological diagnosis is?

11. What were the results of the cultures done ____________________, and where were they taken from? ____________________________

12. What did the x-rays show?

13. What is hypoxia?

14. How much and how long was amoxicillin to be used?

15. What are LFTs?

16. Did he require intubation?

17. What is AMA?

18. What did his mental status disclose?

19. Did the lung infiltrates clear?

C-12 / Answers

1. parotidectomy; removal of a parotid gland
2. no; it was pretty fast
3. dense right upper lobe infiltrate
4. pneumonia
5. if you said yes, you would be correct
6. ceftizoxime and erythromycin
7. no
8. it went down (12,800 from 31,800 at first hospital to 26,700 to 12,800)
9. surprisingly, no temperature was recorded; he was probably febrile when admitted
10. bacteriological diagnosis = one based on the results of a culture
11. negative cultures - blood and sputum
12. involvement of multiple lobes (pneumonic)
13. hypoxia \(\rightarrow\) “hypo” = too little oxygen
14. 500 mg three x a day for 10 days
15. LFTs = liver function tests (on the Abbreviation Listing, Volume I)
16. no
17. AMA = “against medical advice”
18. an adjustment disorder with mixed emotional features
19. yes

C-13 / Discharge Summary

FINAL DIAGNOSES:
1. Infectious diarrhea.
2. Urinary tract infection.
3. Rheumatoid arthritis.
4. Seizure disorder.

HISTORY OF PRESENT ILLNESS:
This was the 10th admission for this 55-year-old female with rheumatoid arthritis and a seizure disorder who presented with a two day history of bloody diarrhea.

PAST MEDICAL HISTORY:
Patient has had multiple admissions here for rheumatoid arthritis-related problems including a bunionectomy and seizure disorder and multiple OB admissions.

MEDICATIONS:
Outpatient medications were folic acid 1 mg a day, methotrexate 7.5 mg every Monday, Indocin 20 mg 2 tablets t.i.d., and Dilantin 300 mg q.h.s.

PHYSICAL EXAMINATION:
Showed a chronically ill-appearing female who was week and tired. She was afebrile, described as having shaking chills at clinic. HEENT: The eyes were quite dry. She had many carious teeth. Neck was supple. There was a grade II/VI systolic ejection murmur. Lungs were clear.
Abdomen: there was some discomfort on palpation, however, there is no tenderness, no distention, no guarding, no rebound. Rectal exam showed hempositive stool. There were changes of rheumatoid arthritis in both hands and feet.

LABORATORY DATA:
White count was 10,500, with left shift. Hemacrit was 44, platelets 270. Chem screen was unremarkable except for potassium of 2.2. Urinalysis was normal.

HOSPITAL COURSE:
Patient was admitted to the hospital and treated with IV ceftizoxime. Her diarrhea resolved and her general symptoms improved. Stool smear showed moderate white blood cells and grew out a few nonlactose fermenters, which were not identified. Subsequent stool culture was positive for Klebsiella and blood cultures were negative. Patient was changed to oral ciprofloxacin and she did quite well. At the time of discharge, the patient was afebrile, eating well; she had no diarrhea and her joints, although deformed, were not painful or hurting. The patient was discharged home to follow up with Dr. Joe at the clinic. She was to resume her outpatient medications and her ciprofloxacin was not continued as an outpatient.

C-13 / Questions

1. The diagnosis for infectious diarrhea was based upon?
2. The main reason for admission was?
3. Past surgery included a surgery for removal of: ________________________
4. The bunions were caused by: ________________________________
5. Did the patient have a murmur? Yes or No? If so, what kind was noted: _____ Where would the examiner hear a murmur?
6. Was the stool positive for blood? Yes or No. Write the word describing of that condition: ____________________________.
7. Was the white count elevated? Yes or No?
8. Nonlactose means what?
9. Blood culture was: ________________________________.
10. Why is Klebsiella capitalized?
11. What was done or notated for the seizure disorder?
12. Five words are misspelled. Find and list:

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13. What are carious teeth?

14. Chem survey was normal except for: _______________, which was ____________

15. What was the specific gravity of the urine?

16. She had no joint deformities. True or False?

17. Had the patient ever had children?

18. Did she have a UTI?

19. How many admissions has she had?

**C-13 / Answers**

1. an organism was grown from the culture
2. bloody diarrhea
3. bunions
4. rheumatoid problems
5. yes; II/VI systolic ejection
6. in and around the heart
7. yes; hempositive or guaiac positive
8. no
9. nonlactose = no sugar (based)
10. negative
11. proper noun
12. nothing – not mentioned except as a diagnosis
13. week (weak), shaking (shakeing), ejection (egection), hematocrit, (hematacrit), diarrhea (diarhea) — hope that’s all you found!
14. carious teeth = teeth with cavities
15. potassium 2.2 (unremarkable or normal)
16. no specific gravity was mentioned
17. F – rheumatoid arthritis changes hands and feet
18. yes, since she had had several OB admissions
19. yes (hope you got the UTI for urinary tract infection)
20. 10

C-14 / Discharge Summary

FINAL DIAGNOSES:
1. Left third toe gangrene.
2. Left third toe diabetic foot ulcer.
3. Left foot cellulitis.
4. Insulin-dependent diabetes mellitus.
5. Hypertension.

PROCEDURES:
1. Left third toe amputation October 22, 1999.
2. Intravenous antibiotics.

HISTORY OF PRESENT ILLNESS:
This 41-year-old male has a history of insulin dependent diabetes mellitus and a history of a painful neuropathy especially over his legs and feet. He thinks he hit something with his toe a few days ago but didn't notice any problems. His wife noticed the "hole" under his third toe where it joins the foot today and was very surprised and took him to the hospital here for evaluation. He has not noted any fevers or chills.

PAST MEDICAL HISTORY:
Insulin-dependent diabetes mellitus, history of diabetic ketoacidosis, history of hypertension, history of alcoholism in 1992, and a long history of a painful peripheral neuropathy, especially of his legs and feet.

PAST SURGICAL HISTORY:
Appendectomy.

MEDICATIONS:
Include Tylenol #3 p.r.n. pain, NPH 40 units subcutaneous q.a.m., 25 units q.p.m., regular insulen 5 units subcutaneous a.m., and 5 units subcutaneous p.m., Lisinopril 10 mg every day. No known drug allergies.

SOCIAL HISTORY:
Once a week he drinks alcohol, no cigarettes. Works as a salesman, lives at home with his wife, and son.

**PHYSICAL EXAMINATION:**
Patient with a temperature of 100.8 degrees, heart rate of 103, respirations 18, blood pressure 95/62, and 110/60. Patient is awake and alert, oriented x4. Pupils equal and reactive to light. Oropharynx clear. Lungs clear to percussion bilaterally. Heart: Regular rhythm, no murmer. Abdomen soft, nontender, normoactive bowel sounds, well-heeled right lower quadrant scar. Extremities: Warm and soft; left foot cellulitis, dorsum of foot for inches and plantar aspect for 4 inches especially around the third toe. There is a large, open necrotic ulcer that joins the left third toe on the foot, no purulence, dry with areas of gangrene, no exposed bone visible at the time of admission. He had 2+ dorsalis pedis pulses bilaterally, 3+ radial artery pulses bilaterally. No back or costovertebral angle (CVA) tenderness.

**LABORATORY DATA:**
X-rays of the left foot show no obvious osteomyelitis. Acucheck is 126.

**ASSESSMENT:**
Cellulitis, plantar aspect of left 3rd toe, also gangrenous changes cellulitis, dorsal and plantar aspect of the left foot. Left foot neuropathy.

**PLAN:**
I recommended to the patient a left third toe amputation as well as IV antibiotics. I talked to him and his family who were present at length. They may need further amputation in the near future. Interestingly, he also has positive, palpable pedal pulses as described previously, but I told him that was no guarantee that he would heal. Also I offered the patient surgery immediately, but he wanted to see how he would do overnight on antibiotics alone; he was not quite ready at the time of admission for left reamputation and wanted to wait until morning for another evaluation by myself.

Problem #2: Insulin-dependent diabetes mellitus, start sliding scale insulin.

Problem #3: Hypertension, well controlled on p.o. Lisinopril.

**HOSPITAL COURSE:**
The next morning I saw the patient and the left third toe had gangrenous changes, diabetic foot ulcer, chronic cellulitis. His temperature was 101.6 degrees. I talked to the patient again [and said] that we should proceed with the left third toe reamputation as he certainly was not getting any better. He agreed. The surgery was done, amputation, and we left the wound wide open. The left third toe was gangrenous with minimal bleeding. The wound was left open and a dry dressing was placed. We started using Karigel on his wound, continued the antibiotics. The next day, his temperature was 98.6 degrees; this was October 22, 1999. On October 24, 1999, his temperature which had been 102 degrees went down to 101.4, heart rate was 88 to 100 and his left foot is still swollen with cellulitis; around the open wound there is gray tissue, left
dorsalis pedis palpable.

I talked to the patient and his family that I think we should proceed with further surgery in view of the fact the infection seemed to be worsening. I had spoken to him and his family previously, including his wife, about obtaining vascular surgical consultation at Lafayette. The patient tells me he does not wish to have any vascular surgery and does not wish to go to Lafayette either and his wife and his sister agreed that they would rather have him stay here get the care that we can provide here for his problems of infections and diabetes.

I talked to them very emphatically that we should proceed with a guillotine amputation, as he appears to have a septic foot. I spoke to Dr. John Doe who agreed with me and that sounded like the best course to try to get him out of his problem with infections. I discussed with the family that I expected a guillotine amputation even if he did well with that, would still need to be revised in the near future to a below knee amputation or an above knee amputation as indicated. I also changed his antibiotics to IV gentamicin, cefazolin and flagyl. I discussed this with Dr. Doe because of the culture and sensitivities we had back and we did do that. On October 24, 1999, he had left above ankle guillotine amputation, finding edematous tissues above the ankle amputation site, no purulence. The wound was left open; he was continued with antibiotics. He did improve after that surgery; his fever went away, and in several days, I talked to the patient again.

We did take the patient back to the operating room to do a revision - we performed a left below knee amputation on October 30, 1999. I closed the wound. The patient seemed to do well with that. He had another week of antibiotics to be sure he was absolutely better and to be sure he had good healing. I got physical therapy to get more involved with his care while he was in the hospital so that he could make future plans as an outpatient as well as begin some exercises and physical therapy while in the hospital. That seemed to go well.

He was discharged in good condition November 7, 1999 much improved, on Tylenol #3 p.r.n. and Keflex. I did get Dr. Smith to see the patient from Internal Medicine to make a long-term plan so this patient had diabetic care.

**DISCHARGE MEDICATIONS:**
Include Keflex 500 mg q. x14 more days, NPH 40 units subcutaneous q.a.m., 25 units subcutaneous q.p.m., regular 5 subcutaneous q.p.m., regular 5 subcutaneous q.p.m., Tylenol #3 for pain p.r.n.

**DISPOSITION:**
To followup with Dr. Smith November 14, 1999 for diabetic care and followup in Surgery Clinic with myself in two weeks. He was to have no concentrated sweets in diet. Activity at home was as tolerated. He is to continue outpatient physical therapy. He was also given 1/2-inch xeroform dressings to change q. day with a Kerlix wrap to his amputation site. Long-term plans included getting rehab as well as a prosthesis, which the patient preferred, as well as his wife, to have done here as an outpatient.
C-14 / Questions

1. Patient was admitted for what?

2. As a result of his diabetes, he had painful: _________________________.

3. The condition in #2 is described as: ________________________________.

4. Was his temperature elevated? _____; how about heart rate? (give us a guess)? And was the blood pressure elevated? Yes or No?

5. Although an unusual combination, it is commonly used -- normoactive. What are the root words, which have been combined? __________ and _____________________.

6. He had a right lower scar in the abdomen as a result of what kind of surgery?

7. Where was the cellulitis located?

8. Was purulence (purr-you-lence) of the cellulitic area noted? Yes or No?

9. What does purulence mean?

10. The dorsalis pedis pulses of the feet were: ________________, and radials were: ______________________________

11. Was there CVA tenderness? Yes or No?

12. Osteomyelitis is an inflammation/infection of the: ______________________________

13. Did he have any evidence of osteomyelitis? Yes or No?

14. The first procedure was to amputate the ________________________; but the condition worsened (the gangrene was progressively moving), so a second procedure, ________________________, was done which still didn’t solve the problem, so what happened?

15. Was the patient febrile at any time? Yes or No?

16. Is it your humble opinion that the dictator may have rambled a little too much?

17. Five words are misspelled. List them:
18. The report states “the family may need amputation...” Did you wonder about that? Yes or No? What did he really mean?

19. The wounds which had been left open were finally closed on ________________.

20. The doc mentioned “I got physical therapy....” Did he mean he himself got it? Yes or No? -- (some more of the funny stuff)

21. Who consulted on the case ________________, and what did he do for the patient?

22. Xerofoam dressings were to be used ________________ a day.

23. What is a prosthesis?

C-14 / Answers

1. a sore toe (a hole in the toe)
2. peripheral neuropathy
3. abnormal extremity neurologic function
4. yes, yes (over 90 is fast-with 60 to 70 about normal for a healthy person; no
5. normally active
6. appendectomy
7. on the dorsum of the foot and the plantar aspect especially around the left third toe
8. no
9. purulence = pus-like drainage
10. 2+, 3+
11. no - remember it is costovertebral angle
12. bone (mostly)
13. no
14. the toe (third left) was amputated; then reamputation was done, then the gangrene kept creeping up, so an amputation was done at the ankle, then the gangrene got worse so they amputated below the knee.
15. yes, several temperatures are recorded over normal
16. if you said yes, we think you’re right
17. mellitus (melitus); peripheral (peripherel); insulin (insulen); murmur (murmer); healed
(heeled – interesting thought)

18. the patient, obviously – or maybe he meant the family needed to be separated from one another – who knows

19. 10-30-99

20. just another curiosity, of course, the patient got PT – see what we mean about English

21. Dr. Smith, long-term plan (also was to follow the patient for diabetes)

22. once

23. prosthesis = an artificial substitute for a missing part of the body (wonder if they dispense new brains?)

You have completed the discharge summaries, now continue on to post-mortem.

**D. Autopsy Reports**

Postmortem exams are performed after the demise of a patient to determine the cause of death. Examination is often very thorough, particularly if the death was related to trauma, or the cause of death was unknown. A complete external exam of the body is done. As each of the body regions is opened and dissected, the organs, muscles, and bones, etc., are described in detail, particularly if there is pathology noted. The terminology is quite different than that of the other reports you have dealt with, using a rich variety of the Latin/Greek language, and contains, as we noted, a great more detail relating to the body and its systems.

Unless you work for a teaching hospital or a coroner’s office, you will not often encounter this type of dictation; however, the terminology is so extensive, it was included to expand your exposure to the terminology. The autopsies selected are from a state medical examiner. These examiners (MEs) are often mandated by the law to provide the postmortem to discover the actual cause of death.

The *Toxicology Report*, which follows the postmortem, details the “the sum of what is known regarding poisons, the scientific study of poisons, their actions, their detections, and any treatment of the conditions produced by them.” The toxicology reports are not included in this study, because the terminology is not “general medical,” and is rarely used for anything other than that required in a pathology department. If you ultimately work for a pathologist, you will need to acquire the reference books detailing specifically that vocabulary.

Headings typically include:

<table>
<thead>
<tr>
<th>FINAL DIAGNOSIS</th>
<th>Based on the postmortem exam (not necessarily the same as that rendered by others in the medical report).</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAUSE OF DEATH</td>
<td>Self-explanatory.</td>
</tr>
<tr>
<td>MANNER OF DEATH</td>
<td>Describes circumstances: i.e. natural, traumatic, etc.</td>
</tr>
<tr>
<td>EXTERNAL EXAMINATION</td>
<td>This is a description of what was noted externally.</td>
</tr>
<tr>
<td>----------------------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>POSTMORTEM CHANGES</td>
<td>Notes what has happened to the body since its death.</td>
</tr>
<tr>
<td>INTERNAL EXAMINATION</td>
<td>This is a detailed exam of each area of the body when it is opened for detailed examination. Systems examined may include: head, neck, body cavities, cardiovascular system, respiratory system, internal abdominal organs, hemic and lymphatic systems, genitourinary system, endocrine system, digestive system, and musculoskeletal system.</td>
</tr>
<tr>
<td>TOXICOLOGY</td>
<td>Specimens are removed for further analysis from organs, blood, bile, stomach contents, brain, liver, vitreous, etc., and a separate microscopic report is prepared by the pathologist. In these samples, the toxicology reports are not included.</td>
</tr>
<tr>
<td>SPECIAL STUDIES</td>
<td>May include radiographs of the body.</td>
</tr>
</tbody>
</table>

**NOTE:** The reports are actual medical examiner’s cases. This particular client did not want the inch signs (“”) or foot (‘) signs written out. In most cases, you do not use them, but wanted you to know this was a client preference.

### D-1 / Autopsy Report

Name of Decedent: John Brown  
Autopsy Performed by: Fred Flintstone, M.D.  
Date of Autopsy: June 29, 2009

**FINAL DIAGNOSIS:**

I. PENDING TOXICOLOGY.  
II. PULMONARY CONGESTION (RIGHT 640 GM, LEFT 320 GM).  
III. VISCERAL CONGESTION.  
IV. STATUS POST GUNSHOT WOUND OF TORSO (DATE UNKNOWN).  
A. VERTEBRAL COLUMN AND SPINAL CORD TRAUMA (ANAMNESTIC):  
   1. PARAPLEGIA.  
      a. ATROPHIC LOWER EXTREMITIES.  
      b. STATUS POST MULTIPLE SURGERIES.

_I hereby certify that I, Fred Flintstone, M.D., Medical Examiner I, have performed an autopsy on the body of John Brown, on the 29th day of June, 1999, commencing at 11:00 a.m., in the Stone Mortuary of the Office of Chief Medical Examiner of the City of Salt Lake. This autopsy was performed in the presence of Dr. Smith._

**EXTERNAL EXAMINATION:**

The body, identified by an affixed name tag, is of a well-developed, well-nourished, thin-
framed, 70", 144 lb, dark brown skinned black man whose appearance is consistent with the recorded age of 20 years. The head is symmetric and the tightly-curled, black scalp hair is 1". There is a 1/4" mustache and a 1/4" goatee. The eyes have brown irides and clear conjunctivae without petechiae, jaundice, or hemorrhage. The ears are normally formed and are unremarkable. The nasal cartilage and bones are unremarkable upon palpation. The nares are patent. The oral cavity has natural teeth in good repair and an atraumatic mucosa. The face is symmetrical and there are no palpable fractures. The neck is straight and unremarkable. The anterior and posterior aspects of the torso are well-developed. The genitalia are of a normal adult, circumcised male with descended testes. The anus is atraumatic. The extremities are well-developed. There are no wrist scars. The nails are long, intact, and focally cyanotic.

There are multiple, well-healed scars over the anterior aspect of the neck, almost in the midline. There are two, well-healed scars over the right side of the chest in the superior mammary region. There is an irregular, well-healed scar over the right side of the chest in the inferior mammary region. There is an obliquely-oriented, well-healed surgical scar over the left side of the upper chest in the superior and medial mammary regions, extending from the left clavicle to the sternum. These scars then extend over the midline of the sternum and xiphoid process, and continue across the left upper quadrant of the abdomen in a horizontal fashion before extending up into the left axilla, along the lateral aspect of the left side of the chest. The scar extends over the left side of the upper back. There is a well-healed, midline laparotomy scar from just above the umbilicus to the pubic symphysis. There are multiple, well-healed scars over the left side of the abdomen. There are multiple well-healed scars in both groin regions. There is a curvilinear, well-healed scar over the lateral quadrant of the left buttock. There is a linear, well-healed scar over the anterior aspect of the distal right thigh. There is a well-healed scar overlying the right patella. There is a well-healed, circular scar on the anterior surface of the midright lower leg. There is a well-healed scar over the medial aspect of the right ankle. There are multiple, well-healed scars overlying the left patella. There is a well-healed scar over the dorsal aspect of the left foot and ankle. There are linear, well-healed scars in the left antecubital fossa. There is a well-healed scar over the posterior aspect of the mid-left forearm. There are well-healed scars over the dorsal aspect of the left hand, at the base of the fingers. There is a well-healed scar over the extensor surface of the right wrist. There are well-healed scars over the dorsal aspect of the right hand, at the base of the fingers.

There are multiple, well-healed excoriations over the dorsal aspects of the left toes. The lower extremities are markedly atrophic.

**POSTMORTEM CHANGES:**
Rigor mortis is moderate and symmetrical; lividity is fixed, dorsal, and violet; the body is cold to the touch. The cornea is cloudy. There is drying artifact over the lips. There is diffuse green discoloration on the abdomen in the right lower quadrant.

**CLOTHING:** The body is examined unclothed.

**THERAPEUTIC PROCEDURES:** None.
INJURIES, EXTERNAL AND INTERNAL:
There are no new injuries of the body. There is a 3/4", circular, well-healed scar over the right side of the upper back, overlying the right scapula. (Comment: it is possible that this scar represents a healed gunshot wound.) Upon internal examination of the body cavities, there are multiple, dense adhesions from the left lung to the chest wall. There is irregular calcification of the distal cervical and proximal thoracic vertebral column. The heart and aorta appear unremarkable. (Comment: the exact wound path of the old gunshot wound cannot be determined.)

INTERNAL EXAMINATION:

HEAD: The scalp is without abrasion or laceration. There is no subgaleal hemorrhage. The skull has no fracture. There is no epidural, subdural, or subarachnoid hemorrhage. The dura is unremarkable. The leptomeninges are congested but otherwise unremarkable. The brain weighs 1,560 gm has normal distributions of cranial nerves and cerebral vessels. There is no atherosclerosis. The white and gray matter are normally distributed. The deep nuclei and ventricles are unremarkable. The brain stem and cerebellum are unremarkable. There are no focal lesions.

NECK: The cervical vertebrae, hyoid bone, trachea and laryngeal cartilages, strap muscles, and other paratracheal soft tissues are without trauma. The larynx and trachea are congested but otherwise unremarkable. The tongue is unremarkable. There is a healed tracheostomy site on the anterior aspect of the neck skeleton.

BODY CAVITIES: The neck, thoracic, abdominal, and pelvic organs are in their normal situs with dense, fibrous adhesions from the left lung to the chest wall. There are multiple adhesions from the small and large intestines to the anterior abdominal wall. There are no abnormal fluid accumulations. The subcutaneous, adipose tissue is unremarkable.

CARDIOVASCULAR SYSTEM: The pericardium is without exudate or adhesion. There is no excess fluid in the pericardial sac. The heart weighs 310 gm. The epicardial surface and fat are unremarkable. The heart has a normal distribution of patent coronary arteries. The myocardium is uniformly dark red without hemorrhage or fibrosis. The walls are not hypertrophied. The endocardium, papillary muscles, chordae tendineae, and four cardiac valves are unremarkable. The chambers are not dilated. The venae cavae and pulmonary arteries are without thrombus or embolus. The aortic arch and great vessels are unremarkable. The aorta is without atherosclerosis. The renal and iliac vessels are unremarkable.

RESPIRATORY SYSTEM: The right lung weighs 640 gm and has a tan/pink pleural surface without blebs or bullae. The lung is dependently congested and the parenchyma exudes tan/red frothy fluid with minimal pressure. There is no consolidation or obstruction. The left lung weighs 320 gm and is eviscerated in a piecemeal fashion secondary to the adhesions. The left lung is congested and the parenchyma exudes tan\red frothy fluid with minimal pressure.
There is no consolidation. The intrapulmonic branches of the tracheal bronchial tree and vasculature of both lungs are unremarkable.

**LIVER, GALLBLadder, PANCREAS:** The liver weighs 1,640 gm and has an intact, smooth, dark brown capsule and dark brown parenchyma without fibrous, nodular, or fatty texture. There are no focal lesions. The portal vessels are unremarkable. The unremarkable gallbladder contains less than 5 mL of thick, dark yellow bile and no stones. The cystic and common bile ducts are without dilation or obstruction. The pancreas has mild post mortem changes but is without focal lesions.

**HEMIC AND LYMPHATIC SYSTEMS:** The spleen weighs 100 gm and has an intact, smooth, light purple capsule and dark red parenchyma without prominent, white pulp. There are no focal lesions. Lymph nodes are not enlarged.

**GENITOURINARY SYSTEM:** The right kidney weighs 110 gm; the left kidney weighs 130 gm. The capsules of both kidneys strip with ease to reveal smooth, subcapsular surfaces. The architecture and vasculature are unremarkable. The corticomedullary junctions are well defined. There is diffuse congestion of the renal parenchyma. The ureteropelvic junctions are unremarkable without stones or dilation. The ureters maintain uniform caliber into an unremarkable bladder containing less than 2 mL of clear yellow urine. The prostate gland is not enlarged. The testes are atraumatic.

**ENDOCRINE SYSTEM:** The pituitary, thyroid, and adrenal glands are each normal in size, color, and consistency.

**DIGESTIVE SYSTEM:** The esophagus and gastroesophageal junction are unremarkable. The stomach contains approximately 20 mL of tan liquid without discernible fragments of food, tablets, and pills. The gastric mucosa and wall are unremarkable. The small and large intestines are unremarkable. An appendix is not present.

**MUSCULOSKELETAL SYSTEM:** The vertebrae, clavicles, sternum, ribs, and pelvis (were not described above under injuries) are unremarkable. The musculature is normally distributed and unremarkable.

**TOXICOLOGY:** Specimens submitted for toxicologic analysis are: heart, blood, bile, urine, gastric contents, brain, liver, and vitreous humor; a separate report will be issued.

**SPECIAL STUDIES:** Post mortem radiographs of the body are made and retained.
D-1 / Questions

1. The number 1 diagnosis notes that there is no specific cause of death or main diagnosis, because it is deferred pending what?

2. *Toxicology* means what?

3. *Congestion* was noted on the final diagnosis of two areas:

   | a |
   |
   | b |

4. What trauma was noted on the final diagnosis?

5. *Irides* is the plural form of: ____________________________.

6. The nails are focally *cyanotic*. What does that mean?

7. Multiple scars were noted, one of which was a surgical scar located where?

8. Had the patient had a *laparotomy*? Yes or No? How was this evidenced?

9. What does *curvilinear* mean?

10. Were scars noted near the *patella*? Yes or No?

11. Noting the injuries section, was the current 3/4” scar related to the cause of death?

12. When they opened the head, did the brain have:

   | a | lacerations | Y/N |
   | b | hemorrhage  | Y/N |
   | c | fractures   | Y/N |

13. How much did the brain weigh?
14. Name 5 of the brain features examined:

| a |
| b |
| c |
| d |
| e |

15. Had the dead man ever had a *tracheostomy*? Yes or No?

16. Did the cardiovascular system note any particular anomalies, irregularities, or pathology? Yes or No?

17. Name 5 features of the *CV system* which were examined:

| a |
| b |
| c |
| d |
| e |

18. *Venae cavae* is plural for what?

19. Were the lungs congested? Yes or No?

20. Relating to the lung, *intrapulmonic* means what?

21. Did the bladder contain urine? Yes or No?

22. The *ureters* are located in what body system?

23. The *appendix* showed what?
24. Specimens from where were submitted for toxicological exam?

25. Based on the entire report, can you guess the cause of death; if so, note it: ________________________________.

D-1 / Answers

1. toxicology
2. toxicology = the sum of what is known regarding poisons, the scientific study of poisons, their actions, their detections, and any treatment of the conditions produced by them
3. (1) pulmonary, (b) visceral
4. gunshot wound of torso, vertebral column and spinal cord trauma
5. iris (eyes; singular) – irides (plural)
6. cyanotic = bluish discoloration of the nail beds
7. left side of the upper chest, superior and medial mammary regions, extending from the left clavicle to the sternum
8. yes — note made of same just above the umbilicus to the pubic symphysis
9. curvilinear = curved line
10. yes
11. no — it was an old well-healed scar meaning it had some relationship to the past
12. (a) no, (b) no, (c) no
13. 1,560 grams (gm)
14. here are 8 possible answers:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>galea (subgaleal)</td>
</tr>
<tr>
<td>2</td>
<td>dura</td>
</tr>
<tr>
<td>3</td>
<td>leptomeninges</td>
</tr>
<tr>
<td>4</td>
<td>cranial nerves</td>
</tr>
<tr>
<td>5</td>
<td>cerebral vessels</td>
</tr>
<tr>
<td>6</td>
<td>white and gray matter</td>
</tr>
<tr>
<td>7</td>
<td>brain stem</td>
</tr>
<tr>
<td>8</td>
<td>cerebellum</td>
</tr>
</tbody>
</table>

15. yes — see exam of the neck
16. no — most were unremarkable
17. any 5 of pericardial sac, coronary arteries, myocardium, endocardium, papillary muscles, chordae tendineae (cord-ay tend-in-ee), cardiac valves, chambers, venae cavae, pulmonary arteries, renal and iliac vessels
18. vena cava (singular) -- venae cavae (plural)
19. yes
20. intrapulmonic → “into the pulmonic”
21. yes -- 2 mL
22. genitourinary
23. it was not present (had been surgically removed – one of those many scars noted from previous surgery)
24. Any four of: heart, blood, bile, urine, gastric contents, brain, liver, vitreous humerus
25. The examiner could not tell; the gunshots were old (patient was a paraplegic), had had many surgeries; did have pulmonary congestion; diagnosis will not be done until the toxicology report is complete; almost sounds like pneumonia may have killed him

D-2 / Autopsy Report

Name of Decedent: Margaret McGillcutty M.E. Case #: 345678
Autopsy Performed by: John A. Rigor, M.D. Date of Autopsy: June 22, 2009

AUTOPSY FINDINGS:

I. HYPERTENSIVE AND ARTERIOSCLEROTIC CARDIOVASCULAR DISEASE.
   A. CARDIOMEGALY.
   B. CORONARY ARTERY ATHEROSCLEROSIS, FOCALLY CALCIFIC.
   C. ARTERIONEPHROSCLEROSIS.
II. MARKED PUTREFACTION.

CAUSE OF DEATH: HYPERTENSIVE CARDIOVASCULAR DISEASE.

MANNER OF DEATH: NATURAL.
I hereby certify that I, John A. Rigor, M.D., Medical Examiner II, have performed an autopsy on the body of Margaret McGillcutty, on the 22nd day of June 1999, commencing at 3:15 p.m., in the ABC Mortuary of the Office of Chief Medical Examiner of the City of Salt Lake. This autopsy was performed in the presence of Dr. Milestone and Dr. Mortem.

EXTERNAL EXAMINATION: The unclothed body is that of a well-developed, decomposed, 5' 7", 75 lb, white woman, whose appearance is consistent with the reported age of 76. Muscular rigidity has passed and lividity is indistinct in the cool body. The body is in a state of marked decomposition, with bloating, skin slip, generalized discoloration. Maggot infestation is marked, especially involving the head and the right forearm. No visible injuries are present, and the x-rays are unremarkable. The scalp is covered by slipping, curly, gray hair approximately 4" in length. No trauma can be identified in the face. The eyes are extensively decomposed. The oral cavity is grossly atraumatic. The gums are nearly edentulous. A single dental plate is in the oral cavity. The neck is straight and atraumatic. The chest is symmetric. The abdomen is tympanically distended, but free of penetrating trauma. External genitalia are those of an adult female. An apparent vertical, 2-1/2" surgical scar is in the right lower abdominal quadrant. Examination of the hips reveal vertically oriented, bilateral scars over the outer lateral hip region, each approximately 8" in length (probable hip replacement site). The lower extremities are unremarkable. The upper extremities are free of visible trauma or wrist scars. The back is
INTERNAL EXAMINATION:

GENERAL: Subcutaneous tissues are well hydrated. The skeletal muscles are brown and unremarkable. Minimal intravascular blood remains. The viscera are in a state of generalized decomposition. Scant decompositional fluid is in the pleural cavities, with greasy fluid in the abdominal cavity. Focal fibrous adhesions are noted in the abdominal cavity towards the right lower quadrant.

HEAD: The scalp and galea have no evidence of trauma. The calvarium is of normal thickness and free of fractures. The dura slips readily from the overlying cranial vault, and no epidural, subdural, or subarachnoid collections of blood or other fluids are visible. The approximately 1000 gm brain consists of fluid gray-green paste with no identifiable structure. The base of the skull is free of fractures.

NECK: Neck dissection reveals no strap muscle hemorrhages or trauma of the ossified, delicate hyoid bone and thyroid cartilage. The posterior oropharynx is free of foreign bodies. The cervical spine is atraumatic. The larynx is unremarkable.

CARDIOVASCULAR SYSTEM: The 380 gm decomposed heart appears large. On cross section patchy, calcific atherosclerotic stenosis of the right dominant coronary arterial system is noted, with narrowing up to approximately 25%. The myocardium is spongy and gray-brown. The endocardial surfaces are discolored, but free of focal lesion. No abnormalities of the valves or aorta are noted.

RESPIRATORY SYSTEM: The 320 gm right lung and 320 gm left lung have spongy surfaces, with bullous change (emphysema versus putrefaction). No focal consolidation or masses present. The vasculature is free of thromboembolus. The airways have red to maroon discoloration.

DIGESTIVE SYSTEM: No gross lesions are identified in the gastrointestinal system. The vermiform appendix cannot be identified. The stomach is empty.

HEPATOBIILIARY SYSTEM: The 670 gm liver has a dark gray atraumatic surface. On cross-section, the hepatic parenchyma is gray-brown and spongy with no focal identifiable lesions. The gallbladder has putrefied and collapsed with regional staining of the soft tissues. The pancreas is markedly putrefied.

HEMIC AND LYMPHATIC SYSTEMS: The 35 gm splenic remnant consists of dark fluid, with no gross focal lesion. No recent lymphadenopathy can be identified. The thymus is absent.

GENITOURINARY SYSTEM: The 100 gm right kidney and 100 gm left kidney have granular, subcapsular surfaces. On cross-section, no focal lesions are in the putrefied parenchyma. The ureters are of normal caliber. The urinary bladder is damp, contains no free urine. The uterus,
fallopian tubes, and ovaries cannot be identified.

**ENDOCRINE SYSTEM:** Severe putrefaction precludes examination of the endocrine system.

**D-2 / Questions**

1. Were x-rays done of the body?
2. Did the patient have teeth? What statement was made in the autopsy on which you based your answer?
3. Describe surgical scars: __________.
4. What does *atraumatic* mean?
5. Did the body show signs of dehydration?
6. What kind of changes were noted on exam of the lungs?
7. What was notable about the uterus, fallopian tubes and ovaries?
8. For the organs in #7, do you think they might have been missing?
9. What was the probable cause of death pending the final toxicology report?
10. Did the patient have an enlarged heart on the original diagnosis? Describe the word used for that opinion?
11. What did the dissection of the organ in #10 state in terms of size?
12. Note any other pathology of the CV (cardiovascular) system?
13. Check the answer on #12 against the Autopsy Finding Diagnoses. Do you see a correlation there? Yes or No?

**D-2 / Answers**

1. yes (see external examination)
2. yes (some anyway) – the gums are nearly edentulous (“e” = without teeth)
3. 2 ½ inch vertical scar right lower abdominal quadrant; bilateral lateral hip (2) 8 inch
4. atraumatic → “a” = without attached to trauma = adjective
5. no -- subcutaneous tissues are well hydrated
6. bullous
7. they were not identified
8. yes -- were probably removed at a prior surgery
9. hypertensive cardiovascular disease
10. yes -- cardiomegaly (see I.A.)
11. heart appears large
12. patchy, calcific atherosclerotic stenosis of the right dominant coronary arterial system with narrowing up to approximately 25%
13. yes (see I.C.)

D-3 / Autopsy Report

REPORT OF AUTOPSY
Name of Decedent: Wilma Flintstone M.E. Case #: M99-03358

Autopsy Performed by: John Mortem, M.D. Date of Autopsy: June 20, 1999

FINAL DIAGNOSES

I. RULE OUT ACUTE COCAINE INTOXICATION.
II. INTRACEREBRAL HEMORRHAGE.
III. CHRONIC INTRAVENOUS DRUG ABUSE.
   A. ACQUIRED IMMUNODEFICIENCY SYNDROME (ANAMNESTIC).

CAUSE OF DEATH: PENDING.

MANNER OF DEATH: PENDING.
I hereby certify that I, John Mortem, M.D., Medical Examiner II, have performed an autopsy on the body of Wilma Flintstone, on the 20th day of June, 1999, commencing at 8:00 a.m., in the Manhattan Mortuary of the Office of Chief Medical Examiner of the City of New York. This
Autopsy was performed in the presence of Dr. Rigor.

External Examination: The body is that of a 66", 125 lb, well-developed, well-nourished black woman, whose appearance is consistent with the stated age of 41 years. Rigor mortis is present. Liver mortis is not present. The body is cold. The curly black scalp hair is 2" to 4" long. The irides are brown. There are no petechiae of the bulbar palpebrae or conjunctivae. Few teeth in poor condition are present in the maxilla and mandible. The chest is symmetric. The abdomen is flat. The extremities are symmetric. The external genitalia are those of a normally-developed adult woman. Multiple crusted and white scars are present on the upper anterior chest. Prominent striae are present over the pectoral soles and the abdomen. Multiple pinpoint scars are present in the epigastrium. A ½" linear scar is present with the right upper quadrant of the abdomen. Multiple 1/4" to 1" oval and linear hyperpigmented scars are present on the flexor aspect of the upper extremities (Comment: consistent with parenteral drug abuse). There is a healed 2" ulcer of the medial right leg. There is a healed, scarred 1" ulcer of the medial left leg. There are no injuries. There are no therapeutic interventions.

Internal Examination:

Head: The scalp has no contusions. The skull has no fractures. There is no epidural or subdural blood accumulation. There is no subarachnoid hemorrhage. Leptomeninges are thin and delicate. The arteries at the base of the brain distribute normally. The brain weighs 1500 gm. Marked subarachnoid hemorrhage is prominent over the base. Blood emanates out of the foramen Luschka. The brain is fixed in formaldehyde prior to further examination.

Neck: The cervical spine, laryngeal cartilages, hyoid bone, and strap muscles of the neck have no injuries. Major airways have thin mucosa without foreign material or foam.

Body CAVITIES: Tenacious fibrous adhesions are present within both pleural cavities. There are no liquid accumulations of the pleural, pericardial, or peritoneal cavities. The organs are normally situated and markedly congested.

Cardiovascular System: The 320 gm heart has a smooth pericardium, epicardium, and endocardium. There is no cardiac chamber dilatation. The valves are thin without vegetations, fibrosis or calcifications. The coronary arteries arise from patent ostia and distribute in a right dominant pattern. There is no atherosclerosis. Myocardial cut surfaces are red-brown without fibrosis or necrosis. The pulmonary trunk has no thromboemboli. The vena cavae has no thrombi. The aorta has no atherosclerosis.

Respiratory System: The right and left lungs weigh 500 gm and 480 gm respectively. The pleural surfaces are thin and delicate. The cut surfaces are red-brown without focal induration, cavitation, hemorrhage, or injury. The bronchi and pulmonary arteries are patent.

Liver, Gallbladder, Pancreas: The 2400 gm liver has a thin capsule and a rounded edge. The cut surface of the parenchyma is pale tan without cirrhosis. The gallbladder has no stones.
The pancreas has a tan, lobulated parenchyma.

**HEMIC AND LYMPHATIC SYSTEMS:** The 200 gm spleen has a thin capsule and an unremarkable red-brown parenchyma. The lymph nodes are not enlarged.

**GENITOURINARY SYSTEM:** The right and left kidneys weigh 150 gm and 180 gm respectively. The external surfaces are smooth. The cut surfaces are red-brown without focal induration, cavitation, hemorrhage, or injury. The ureters are slender. The bladder contains no urine. The internal female genitalia are unremarkable.

**ENDOCRINE SYSTEM:** The pituitary, adrenal, and thyroid glands have no nodularities, hyperplasia, or infiltrates.

**GASTROINTESTINAL TRACT:** There are no ulcers in the esophagus, stomach, or duodenum. Approximately 100 mL of partially digested food is present within the gastric lumen. The small and large intestines are unremarkable.

**MUSCULOSKELETAL SYSTEM:** There are no fractures of the ribs, sternum, vertebral column, or pelvis. The musculature is developed.

**D-3 / Questions**

1. What appears to be the cause of death on Wilma?

2. Was a brain hemorrhage noted? If so, describe it: _________________________________

3. *Striae* are mentioned in the external exam. What does that mean?

4. Clearly in the same paragraph relating to question #3, *multiple stria* (sounds like stree-ah) present. What is the plural form of the word *stria*?

5. Is the plural form *striae* incorrect in the report? Yes or No?

6. Were there any suggestions of “needle” markings associated with drug abuse? Describe that finding: __________________________________________________________

7. What do you think therapeutic interventions might be?

8. The skull exam notes several anatomic features/structures, list them:
9. A foramen Luschka is mentioned on the head exam (sounds like for-a -men loosh-ka).

   (a) Is Luschka a noun?

   (b) Change foramen to an adjective:

   (c) Write the phonetic pronouncement of answer.

10. From the paragraph on the CV System, was the heart normal? Yes or No?

11. Since drug abusers are at high risk for AIDS, did this woman have that disease? Yes or No?

   If your answer is Y, describe where you found it and what it says specifically?

D-3 / Answers

1. rule out acute cocaine intoxication
2. intracerebral hemorrhage
3. stria → a streak, a band-like stricture
4. striae (plural) – stria (singular)
5. yes
6. yes — multiple ¼ to 1” oval and linear ... also see the comment
7. therapeutic interventions -- signs of medical care, like IV holes or attachments, breathing incisions (tracheostomy), etc.
8. epidural, subdural, (note: these have the same root but different prefixes), subarachnoid (sounds like a-rack´-noyd), leptomeninges (lep´-toe-men-in´-geez), arteries, foramen Luschka
9. (a) yes, (b) foraminal, (c) for-am´-in-uhl
10. yes -- no abnormalities were described
11. yes; under the diagnosis section, III.A. -- acquired immunodeficiency syndrome

D-4 / Autopsy Report

OFFICE OF CHIEF MEDICAL EXAMINER

REPORT OF AUTOPSY

Name of Decedent: Roger Moore, 007 M.E. Case #: M7891011
Autopsy Performed by: John Mortem, M.D.  Date of Autopsy: June 20, 1999

FINAL DIAGNOSES:

1. INTRACEREBRAL HEMORRHAGE, ? ETIOLOGY.
2. GUNSHOT WOUNDS OF NECK, MULTIPLE; REMOTE; EXACT DATE UNKNOWN CIRCUMSTANCES UNKNOWN.
   A. STATUS POST PERFORATION/FRACTURE OF CERVICAL VERTEBRAL COLUMN WITH RESULTANT QUADRIPLEGIA (CLINICAL).
   B. FOUR OXIDIZED BULLETS RETRIEVED.
   C. STATUS POST STABILIZATION SURGICAL PROCEDURE OF NECK, POSTERIOR; REMOTE; EXACT DATE UNKNOWN.

CAUSE OF DEATH: PENDING.

MANNER OF DEATH: PENDING.

I hereby certify that I, John Mortem, M.D., Medical Examiner II, have performed an autopsy on the body of Roger Moore, on the 20th day of June, 1999, commencing at 9:00 a.m., in the ABC Mortuary of the Office of Chief Medical Examiner of the City of Salt Lake. This autopsy was performed in the presence of Dr. Rigor

EXTERNAL EXAMINATION: The body is received unclad and is that of a 65", 85 lb, cachectic black man, whose appearance is consistent with the stated age of 49 years. Rigor mortis is present. Liver mortis is purple, posteriorly distributed, and fixed. The body is cold.

Extreme four-extremity contracture is present. The body is clothed in a hospital gown and a diaper. The scalp has partial alopecia, with the remaining black-gray scalp hair curly and fine. There is a black mustache and beard. The irides are brown. There are no petechia of the bulbar palpebrae or conjunctivae. Natural teeth in fair condition are present on the maxilla and mandible. The skin is unevenly pigmented throughout the entire body. The chest is symmetric. The abdomen is flat. The extremities are contracted. The external genitalia are those of a normally-developed, circumcised, adult man. Except for the therapeutic interventions and injuries to be described presently, the external examination of the head, neck, torso, and extremities is otherwise unremarkable. There is a 3" area of healed decubitus ulceration involving the sacrum. There is a 3" suprapubic, horizontally oriented scar.

THERAPEUTIC INTERVENTIONS: There is a sutured, 2" craniotomy of the right frontal temporal scalp. There is a 1/4" sutured incision of the left frontal temporal scalp. A 2" blue contusion surrounds a vena puncture of the right dorsal hand. A ½" red contusion surrounds a vena puncture of the right flexor wrist. No catheters reside within the body.

INJURIES:
All the traumatic injuries identified and described in this section are those remote in nature.

**UNSHOT WOUNDS OF NECK:** All of the injuries seen within the neck related to the retrieval of four oxidized bullets are remote in nature. The exact number of wounds cannot be determined. Only a minimum number representing and reflecting the number of bullets retrieved from the body is presented here.

**EVIDENCE OF ENTRANCE GUNSHOT INJURY:**
Two slightly depressed, umbilicated, 1/8" scars are present of the left neck posteriorly (Comment: consistent with scarred entrance gunshot wounds). These scars are seen in close association to a midline 4" surgical scar of the midline cervical vertebral column. A similar 1/8", slightly umbilicated round scar is present of the right flank region.

**EVIDENCE OF GUNSHOT INJURY:**
The entire upper cervical vertebral column, spanning from C1 through C4, is involved with healed fracture, represented by a mass of new bone formation. The cervical spinal cord in this area is slightly attenuated.

**Bullets Retrieved:**
Four oxidized bullets are retrieved from localized areas of scar tissue within the following regions: The upper right sternocleidomastoid muscle, the perimuscular fascia of the left paraspinal muscle anteriorly, the lower portion of the left sternocleidomastoid muscle, adipose tissue above the right clavicle. All these bullets are retrieved and submitted to the evidence unit. They are labeled with sequential capital letters A through D, corresponding to the order presented above, and are submitted to the evidence unit. I find the exact number of gunshot injuries and their course and direction cannot be determined. The minimum of gunshot injuries is four. These injuries, having been described, will not be repeated.

**INTERNAL EXAMINATION:**

**Head:** The scalp has no contusions. The skull has no fractures. There is no epidural or subdural blood accumulation. The brain weighs 1500 gm. Marked subarachnoid hemorrhage is present at the base of the brain. The brain is fixed in formaldehyde prior to further examination.

**Neck:** See injuries described above.

**Body Cavities:** There are no liquid accumulations of the pleural, pericardial, or peritoneal cavities. The organs are normally situated and congested.

**Cardiovascular System:** The 300 gm heart has a smooth pericardium, epicardium, and endocardium. There is no cardiac chamber dilatation. The valves are thin without vegetations, fibrosis or calcifications. The coronary arteries arise from patent ostia and distribute in a right dominant pattern. There is no atherosclerosis. Myocardial cut surfaces are red-brown without fibrosis or necrosis. The pulmonary trunk has no thromboemboli. The venae cavae have no
thrombi. The aorta has no atherosclerosis.

**RESPIRATORY SYSTEM:** The right and left lungs weigh 450 gm and 400 gm respectively. The external surfaces are thin and delicate. The cut surfaces are red-brown without focal induration, cavitation, hemorrhage, or injury. The bronchi and pulmonary arteries are patent.

**LIVER, GALLBLADDER, PANCREAS:** The 1400 gm liver has a thin capsule and an unremarkable red-brown parenchyma. There is no fatty change or cirrhosis. The gallbladder has no stones. The pancreas has a tan, lobulated parenchyma.

**HEMIC AND LYMPHATIC SYSTEMS:** The 50 gm spleen has a thin capsule and an unremarkable red-brown parenchyma. The lymph nodes are not enlarged.

**GENITOURINARY SYSTEM:** There is a single 300 gm horseshoe kidney. The ureters are slender. The bladder contains no urine. The internal male genitalia are unremarkable.

**ENDOCRINE SYSTEM:** The pituitary, adrenal, and thyroid glands have no nodularities, hyperplasia, or infiltrates.

**GASTROINTESTINAL TRACT:** There are no ulcers in the esophagus, stomach, or duodenum. Approximately 40 mL of food is present within the gastric lumen. The small and large intestines are unremarkable.

**MUSCULOSKELETAL SYSTEM:** There are no fractures of the ribs, sternum, or pelvis. The musculature is wasted.

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**D-4 / Questions**

1. In the final diagnosis, is it clear that the patient died of gunshot wounds? Yes or No?
2. It appears that the body showed signs of perforation (fracture) of the cervical vertebrae, which resulted in what condition?
3. So the cause of death is?
4. What is the first clue that the patient had been in the hospital?
5. Would the *quadriplegia* be responsible for the contractions of the extremities? Yes or No?
6. What is a *decubitus* (deh-cube’-it-uss) *ulcer*?
7. Vein puncture is most commonly combined and written as “venipuncture.” Was this word used correctly in the transcription? Yes or No?

8. Where were the residual sites of IV therapeutic intervention?

9. The heading “Injuries” notes that all those listed are remote in nature. What does that mean?

10. Were any bone fractures noted? Yes or No?

11. Patent “ostia” are mentioned. Does this refer to bone? Yes or No?

12. What is the root word for ostia?

13. How does ostia differ from osteon?

D-4 / Answers

1. No — though gunshot wounds are noted
2. Quadriplegia
3. Pending
4. Clothed in a hospital gown and a diaper
5. Yes — disuse
6. Decubitus ulcer — since decubitus means “lying down,” then it is a skin ulcer caused by lying down, constant irritation of the skin where the ulcer is located against the bedding
7. No — typed as “vena puncture”
8. Contusion right dorsal hand (venipuncture), and right flexor wrist
9. In the medical sense, it means that they happened either long ago (and don’t have any impact on the current event), or that they are unrelated to what is being discussed in the current problem
10. Yes, (healed fracture)
11. No — ostia refers to an opening — a door, thus an opening into the coronary arteries in this case
12. Ostium (root word for “ostia”)
13. “Osteon” refers to “bone,” osteo- = prefix

RIP
(Rest in peace)
**E. CONSULTATIONS**

A consultation is a type of service provided by a physician whose opinion or advice regarding evaluation and/or management of a specific problem is requested by another physician or other appropriate source. The request for the consultation and the report itself must be documented in the patient’s medical record.

The consultation itself may be performed in the hospital, a clinic, or in a doctor’s office.

The substance of the report contains the specific problem, the findings of the consultant, and the recommendations (sometimes consultants also assume the care of the patient if the problem and treatment are within the scope of her/his specialty). The formats vary from client to client. The composition is similar to discharge summary-type language and format. A single report is included for evaluation here.

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**E-1 / Consultation Report**

**REASON FOR REFERRAL:** Patient has had amputations of both legs due to diabetic small vessel disease. Has had hernial surgery. Currently is suffering visual disturbances.

**REQUESTING PHYSICIAN:** Homer Jones, M.D., Internal Medicine

**CONSULTATING PHYSICIAN:** James Smith, M.D., Ophthalmologist

**BRIEF REVIEW:** Patient on 26 units NPH. Allergies: penicillin. General health: alert, active person considering his advanced years (79) and his disability coincident with the amputations mentioned.

**OCULAR EXAM:** He has poor vision in his right eye due to a dense cataract. It is light perception only. I obtained further tests and found on B-scan ultrasonography a scatter of intermittent echoes, suggesting vitreous hemorrhaging in that eye. The left eye had vision of hand motion with light projection into all four quadrants. There is a full superior iridectomy, and the left eye shows no evidence of rubeosis. Intraocular pressures are 18 and 14 in the right and left eyes respectively. Fundus exam of the left reveals white stalk-like emanating tissue from the region of the optic nerve obscuring all fundus view. The ultrasonography of the left reveals multiple linear echoes suggestive of vitreous bands and hemorrhage, but no evidence of retinal detachment on the B-scan dynamically or in the photographs.

**IMPRESSION:** Cataract, right eye, with probable vitreous hemorrhage. Vitreous hemorrhage also in the left eye. Surgical aphakia, left eye.

**RECOMMENDATIONS:** Patient should undergo vitrectomy via the pars plana using general anesthesia.
Thank you for the referral.

You have now completed the course work for Medical Terminology. This last section is for fun – we think you’ll enjoy it!

Section III - “PECULIAR DICTATION”

This section deals with actual dictation with some interesting interpretational possibilities. It is included for fun, but the reports from which the sentences were extracted are very real. If you’d like to try your hand at fixing them, please do so, but the answers are sometimes pure conjecture.

Doctors’ illegible handwriting is legendary. When nurses and other professionals, such as medical transcriptionists, are unable to translate medical scrawl into understandable English, this can create problems with patient quality care issues. With the advent of dictation equipment, hospital and office workers rejoiced that this equipment would improve the situation. Has it? Well, yes and no. For the most part, transcribed information is far more accurate and, thus, useful; however, on occasion doctors have a tendency to push the wrong button, put the proverbial foot in the mouth, speak nonsensical jargon - cough, sneeze and eat while dictating - and use misplaced modifiers. On the flip side, they are often harried, overworked, and simply (mentally) are just not at top form. The results are amusing and occasionally most confusing (as you might have already noticed). These examples represent why we termed MTs as interpreters.

The following is a sample of what medical transcriptionists have heard and transcribed. We have often thought it would be fun to send it the way it was dictated, stating “THIS IS WHAT YOU ACTUALLY DICTATED, DOCTOR.”

First, read the sentence, and then see if you can make it into some kind of sense (a Sherlock Holmes activity, which is often the real case in transcribing, interpreting, or auditing medical reports). Recognizing that the answers are sometimes subjective too, we did our best to tell you how we would have done it.
Peculiar Dictation / Suggested (Possible) Answers

“The father died in his 90s of female trouble in his prostate and kidneys.”
   Answer: Delete female

“Both the patient and the nurse herself reported passing flatus.”
   Answer: The patient reported passing flatus (gas from the rectum) and the nurse observed same (or smelled it? Or, the patient told her about it and she simply recorded it?) ... or, they both had a problem ...

“The pelvic examination will be done later on the floor.”
   Answer: This is typical. Things “done on the floor,” mean in the patient’s room rather than in the operating room, emergency room or such. When the dictator says, the patient was moved from the gurney to the “floor,” they didn’t really put the patient on the floor, though this presents an interesting mental picture, doesn’t it?

“The left leg became numb at times and she walked it off.”
   Answer: She didn’t really walk her leg off, she walked off the numbness.

“On the second day, the knee was better and on the third day it had completely disappeared.”
   Answer: The knee did not disappear, the pain did.

“A week after operation she spiked a femur.”
   Answer: Oops, “fever.”

“The baby girl was circumcised on the second postnatal day.”
   Answer: “Boy” please; girls are not circumcised in this country.

“At the time of onset of pregnancy, the mother was undergoing bronchoscopy.”
   Answer: Certainly presents an interesting picture, doesn’t it? How about “the mother underwent bronchoscopy about the time of the onset of pregnancy.”

“The patient was discharged home to take a tall one every day.”
   Answer: This was really a (rare) transcription error since the drug Talwin was what the doctor intended her to transcribe.

“Patient left his white blood cells at another hospital.”
   Answer: The report on same, that is.

“The patient refused autopsy.”
   Answer: Highly unlikely - as the patient lay dying, he said, “NO AUTOPSY!” The missing word is “the patient’s family refused autopsy.”
“Patient was becoming more demented with urinary frequency.”

**Answer:** We’re sure he was frustrated, but doubt the dementia. Maybe frustrated or even tormented?

“She had a miscarriage at the age of four months.”

**Answer:** She would hold the Guinness record. She had a miscarriage at the gestational age of 4 months, or she miscarried in the fourth month of pregnancy. You get it, right?

“Physician has been following the patient’s breast for six years.”

**Answer:** An interesting proposition. He had been following the breast pathology or problem for six years.

“The patient reports that she had considerable pain last night on intercourse in the abdomen.”

**Answer:** The pain was in the abdomen, or was it abdominal intercourse? Let’s go with: patient had considerable pain in the abdomen during intercourse.

“She left the hospital nursing her baby and draining clear urine.”

**Answer:** Another interesting picture. On discharge, she was draining clear urine, and was discharged with her baby who had been nursing ... or, the patient nursed the baby, her urine was clear, and she was discharged.

“The patient’s head was in neutral.”

**Answer:** He meant in neutral position (though we understand that our heads are sometimes in neutral).

“The patient was drenched and raped.”

**Answer:** The patient was prepped and draped.

“Husband also relates severe menstrual bleeding the past two periods.”

**Answer:** Well, now, that is certainly a strong, empathic response. He affirmed that his wife had severe ...

“By the time she was admitted to the hospital, her rapid heart had stopped and she was feeling much better.”

**Answer:** Pretty easy - just add ‘rate’ to heart

“Discharge status: alive but without permission.”

**Answer:** We think it was AWOL (discharged without permission) -- this is a risky one.

“Coming from Detroit, this man had no children.”

**Answer:** Something in the Detroit water? No women in town? This man lives in Detroit and has no children.
“Patient stated that if she would lie down, within two or three minutes something would come across her abdomen and knock her up.”

Answer: Sorry, can’t help with that one and wouldn’t care to venture a guess, even with a good imagination.

“This 14 year-old boy argued with a lawnmower, which then attacked him.”

Answer: That one probably doesn’t need editing. We know how he felt, having had one of those mowers.

“Patient’s abdomen is at war.”

Answer: Well, why not? Leave it be.

“The patient’s past medical history has been remarkably insignificant with only a 40 pound weight gain in the past three days.”

Answer: If that’s not significant, we don’t know much about medicine. He meant thirty days? No, not possible, maybe a minimum of 3 months? That one is a little risky as to the actual time involved.

“This 90 year-old lady was admitted to the hospital as an emergency because of sudden onset of entire left leg.”

Answer: Well, let’s see, maybe it was pain, swelling, redness -- then again, maybe she just noticed the leg again after failing to notice it before?

“Patient is a real gas factory.”

Answer: The dictator probably meant what he said. Transcribed as dictated OK. Maybe this was the same patient whose abdomen was at war.

“The nursing home where the patient lives was noted to sputter, cough and run a fever.”

Answer: I think I would remove myself from that nursing home. Staff at the nursing home had noted ...

“The patient is a 71 year-old female who fractured her little finger while beating up a cake.”

Answer: Man, she must have tremendous power. Delete ‘up.’

“Healthy appearing, decrepit 69 year-old white female, mentally alert but forgetful.”

Answer: Come on, one can’t be healthy appearing and decrepit, mentally alert and forgetful, can one?

“The patient was sent home in plaster.”

Answer: Typical - she was sent home in a plaster cast, but maybe sometimes, they would like to send some patients home “in plaster.”

“The patient states she was bitten by both legs of a dog.”

Answer: A little jumbled but fixable. Bitten in both legs by a dog.
“Patient was a great white male.”
   **Answer:** Well maybe he was. Maybe it was a female doctor. Maybe we should delete great.

“She was apparently quite active while sitting.”
   **Answer:** Maybe she was more active sitting than standing? Naahh ...

“The patient was seen about four weeks ago by a physician with a urethral drip.”
   **Answer:** I don’t think his patient volume will increase much (until he clears up his problem, that is). Easy to fix though -- patient was seen for a urethral drip ...

“According to witnesses, the patient was weaving down the street when he suddenly turned into an automobile.”
   **Answer:** Literally? Wonder what model he decided to be?

“She slipped on the ice and apparently her legs went in separate directions in early December.”
   **Answer:** And she hasn’t seen them since? What is her problem? Fixable.

“The patient was admitted to the hospital on the day of admission.”
   **Answer:** Well, that’s profound. Go figure.

“The patient states the table hit her.”
   **Answer:** Maybe she is paranoid too.

“Patient had acute onset of severe Sunday evening.”
   **Answer:** Personally, Mondays have a much worse onset. He left a word out; we can’t guess from that sentence what it was, but doing the rest of the report (looking for the symptoms or problems), could probably have figured that one out.

“Patient has too much sex growth in the urine.”
   **Answer:** Maybe some kind of hormone factor done on a urine specimen?

“The patient had reportedly been doing very well when, after breakfast, she suddenly lost her right arm and was unable to speak.”
   **Answer:** If one’s arm suddenly fell off, probably would be speechless. She suddenly lost feeling in her arm, and was . . .

“The patient has never been pregnant and denies any reason for this.”
   **Answer:** Yeah, right. Easy to fix; she has never been pregnant and knows of no reason for this (?)

“Patient was provoked by the food on her plate.”
   **Answer:** Well, what, she didn’t like it? Broccoli? Aaaagghhh ...
“Patient was struck by the car in her nose.”
   Answer: A pugilistic car? Hmmm ... Interesting.

“Patient was in her usual state of good health when she felt the toilet in her back.”
   Answer: Hmmm ... did it fall on her? Was she carrying it? (No, she would have noticed that - it wouldn’t have been something she suddenly “felt” would it)? Heck if we know!

“God Bless you medical transcriptionist, whoever you are, may your tribe thrive and multiply.”
   Answer: Amen.

Medical Transcription students will now go to the next course in the program - Surgical Compendium. Coding and terminology students, you are now finished with the Terminology Training. Coding students will now move into the Coding courses per your instructions.