Orthopedics—Terminology

Orthopedics is a branch of medicine that deals with the diagnosis and treatment of diseases and disorders of the musculoskeletal system. These diseases and disorders can be hereditary, developmental, traumatic, inflammatory, or degenerative.

Orthopedic Anatomic Terminology

Here are some rules used to transcribe orthopedic anatomic terminology:

- **Capitalization:** Names of anatomic structures should not be capitalized, except for the eponyms associated with them. Example: os lacrimale or the lacrimal bone, ligament of Treitz.

- **Classification:** Anatomic terms are classified according to posture, region, direction, and position.

- **Directional adverbs:**
  - Directional adverbs are formed by replacing the adjectival suffix -al, -or, -ic) with the suffix -ad, meaning -ward. For example, consider the term caudal, which means nearer the tail or lower end. When we replace the suffix -al with -ad, it will become caudad, meaning toward the tail or lower end.
  - When the adjective or the -ly adverb has been used correctly, it should not be replaced with the -ad form. For example, do not use caudad in “it extends caudally from...”

- **Joining Directional and Positional Adjectives:** When joining directional and positional adjectives, a combining vowel is used. Example: the terms medial and lateral will be joined as mediolateral.

- **Latin and English Names:** English and Latin names of anatomic parts are often mixed. The English term could be used for the noun while the Latin name is used for the adjective. Such terms can be transcribed as dictated or edited to either the Latin or English form. Example: peroneus profundus nerve, latissimus dorsi muscle
Angles

The orthopedic diagnosis process often involves the measurement of angles. When it comes to transcribing angle measurements, you can use either the term “degrees” or the sign for it (°).

Example

Here is an example of how you need to transcribe angle measurements:

- The radiograph showed the intervertebral angle of 10 degrees.
  or
- The radiograph showed the intervertebral angle of 10°.

Planes

The term “planes” is used to refer to an imaginary flat surface. It is mostly used to provide an anatomic orientation. Here are a few planes of the body:

<table>
<thead>
<tr>
<th>Plane</th>
<th>Description</th>
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<tbody>
<tr>
<td>Frontal or Coronal Plane</td>
<td>This is a vertical plane dividing the body or structure into anterior and posterior parts.</td>
</tr>
<tr>
<td>Sagittal or Median Plane</td>
<td>This divides the body or structure lengthwise into right and left parts.</td>
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<tr>
<td>Midsagittal Plane</td>
<td>This divides the body into right and left halves.</td>
</tr>
<tr>
<td>Transverse, Horizontal, or Axial Plane</td>
<td>This runs parallel to the ground and divides the body into upper and lower parts.</td>
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</tbody>
</table>
Terminology

Let’s look at some orthopedic terminology that you are likely to come across and the rules you need to follow when transcribing them.

<table>
<thead>
<tr>
<th>Term</th>
<th>Guidelines</th>
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| Crepitance, crepitation, crepitus | - All three terms are synonymous and mean crackling or popping sounds.  
- The adjectival form is crepitant. Note that crepitants is not a word.  
- Although the term crepitance may not be found in dictionaries, its usage is accepted. However, please verify if crepitance needs to be edited to crepitates during transcription.  
- Example: Patient states she notes crepitus or “a crackling noise” when she moves her head to the left or right. |
| Fingerbreadth             | - This is a commonly used unit of measure for distances measured by hand during a physical examination.  
- The plural form of the word is fingerbreadths, not fingersbreadth.  
- Example: The spleen is palpable 3 fingerbreadths below the left costal margin. |
| Fluctuation, fluctuance  | - Both these terms are synonyms that mean “a wave-like motion that indicates the presence of fluid.”  
- The adjectival form is fluctuant. Remember, fluctuants is not a word.  
- Example: The lump may be described as soft and fluctuant. |
| Possessive eponym        | - Even if dictated, do not use the ‘s in a possessive eponym.  
- For example, transcribe “Phalen’s sign” as “Phalen sign.”  
- Care should be taken not to edit out the “s” where the eponym ends with “s.”  
- Example: Transcribe “Homans sign” as “Homans sign” and not “Homan sign” or “Homan’s sign.” |
| Reflexes                  | - Reflexes are graded on a scale of 0 to 4.  
- Use lowercase “grade” and Arabic numerals.  
- Grades 1 to 4 must be followed or preceded by a plus sign.  
- However, 0 stands alone and denotes absence.  
- When expressing reflexes as a range using “over,” the denominator should be repeated for clarity of expression. For example, “grade 1 to 3 plus over 4” should be transcribed as “grade 1+/4 to 3+/4.”  
- The plus signs should not be used without the numeral. For example, “grade
<table>
<thead>
<tr>
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<th>3+/4” cannot be transcribed as “grade +++/4.”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sign, test, score</td>
<td>• These terms are never capitalized even if they are associated with eponyms.</td>
</tr>
<tr>
<td></td>
<td>• The eponyms that precede these terms should be capitalized.</td>
</tr>
<tr>
<td></td>
<td>• Example: fabere test, Bancroft sign</td>
</tr>
</tbody>
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