Tenderness Grading, Soft Tissue

The recommendations in this protocol apply to grading tissue tenderness. Note: This grading system is NOT used to grade muscle tone or tightness. An algometer may also be used to better quantify tenderness. (See CSPE protocol: Algometer.)

When applying static palpation to joints, muscles, tendons, ligaments, or superficial tissue in general, palpatory pain (i.e. tenderness) can be graded based on the patient’s response.

The following is a recommended scale that can be used for initial assessment and as an outcome measure.

**Grading Scale for Tenderness**

<table>
<thead>
<tr>
<th>Grade</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>+1/4 T, or grade 1/4 tenderness</td>
<td>Tenderness with no physical response</td>
</tr>
<tr>
<td>+2/4 T, or grade 2/4 tenderness</td>
<td>Tenderness with grimace, wince, and/or flinch</td>
</tr>
<tr>
<td>+3/4 T, or grade 3/4 tenderness</td>
<td>Tenderness with withdrawal (positive jump sign)</td>
</tr>
<tr>
<td>+4/4 T, or grade 4/4 tenderness</td>
<td>Non-noxious stimuli (e.g., superficial palpation, gentle percussion) results in patient withdrawal or patient refusal to be palpated due to pain</td>
</tr>
</tbody>
</table>

(Modified after Cipriano 2010)

**Charting**

The following are recommendations for charting:

- **Note if the tender point reproduces** the presenting complaint.
- **Chart if tenderness is greater on the right or left** (e.g., R > L).
• Note if there is a point of maximum tenderness (e.g., several points are graded as +1/4 T, but the patient can identify that one point is clearly more tender than any other).

In a narrative format, an example of appropriate language would be “grade 1/4 tenderness.” Also, one can consider writing a description, e.g., “patient demonstrated a jump sign.”

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