

|   |   | range of motion. [3 <sup>rd</sup> QUARTER]                                                                    |
|---|---|---------------------------------------------------------------------------------------------------------------|
| 2 | 2 | More marked increase in muscle tone through most of the range of motion, but affected parts are easily moved. |
| 3 | 3 | Considerable increase in muscle tone; passive movements difficult.                                            |
| 4 | 4 | Affected part rigid in flexion or extension.                                                                  |

1+

4

4

## MODIFIED ASHWORTH SCALE (MAS) Assessment of Knee Flexors

| Date:<br>Patient<br>Number:<br>Investigator: |                            | <ul> <li>For the purposes of this study:</li> <li>Patient is supine. Opposite leg is straight with hips flexed at 180 degrees. Arms are in a comfortable position for the patient. Head is midline &amp; resting on the examination table.</li> <li>One hand maintains hip stabilization at 90 degrees of hip flexion. As much as possible, avoid any hip adduction, abduction, or rotation. Grasp the medial and lateral condyles anteriorly at the top of the knee. The other hand holds the distal 1/3<sup>rd</sup> of the limb proximal to the ankle posteriorly.</li> <li>The examiner rates the resistance while extending the knee, and and the state of the state of the state of the state.</li> </ul> |  |
|----------------------------------------------|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
|                                              |                            | <ul> <li>over a duration of about <u>one second</u> (by counting "one thousand one"), moving the distal lower limb from maximum flexion to maximum extension.</li> <li>Repeat the measurement 5 to 8 times (choose the most reliable / consistent measurement).</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |
| Assessment                                   | <mark>of Knee Fle</mark> x | <b>xors:</b> Circle the correct measurement.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |
| Left                                         | Right                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |
| 0                                            | 0                          | No increase in muscle tone. Normal muscle tone.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |
| 1                                            | 1                          | Slight increased in tone, manifested by a catch and release or by minimal resistance at the end of the range of motion when the affected part is moved in flexion or extension. [4th QUARTER]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |
|                                              |                            | Olight immersed in terms mentificated has a setable followed has                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |

| 1+ | Slight increased i<br>minimal resistance | n tone, mani<br>throughout the | fested by a<br>e remainder | a catch,<br>c (less tha | followed<br>n half) of | by<br>the |
|----|------------------------------------------|--------------------------------|----------------------------|-------------------------|------------------------|-----------|
|    | range of motion. [3                      | rd QUARTER]                    |                            |                         |                        |           |
|    |                                          |                                |                            |                         |                        |           |

| 2 | 2 | More marked increase in muscle tone through most of the range of motion, but affected parts are easily moved. |
|---|---|---------------------------------------------------------------------------------------------------------------|
| 3 | 3 | Considerable increase in muscle tone; passive movements difficult.                                            |

Affected part rigid in flexion or extension.

| <b>MODIFIED ASHWORTH SCALE (MAS)</b>                         |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |  |
|--------------------------------------------------------------|-------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| Assessment of the Elbow Flexors                              |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |  |
| Date:<br>Patient<br>Number:<br>Investigator:                 |       | <ul> <li>Assessment of the Elbow Flexors</li> <li>For the purposes of this study: <ul> <li>Patient is supine. Opposite arm is in a comfortable position for the patient. Head is midline &amp; resting on the examination table.</li> <li>Stabilize the proximal limb by holding the arm posteriorly on the distal 1/3 of the humerus. Keep the shoulder stable by maintaining the arm close to the chest and parallel to the mid-axillary line.</li> <li>Hold the distal limb at the distal 1/3 of the forearm posteriorly, keeping the arm in a position as close to neutral as possible.</li> </ul> </li> <li>The examiner rates the resistance while extending the elbow, over a duration of about <u>one second</u> (by counting "one thousand one"), moving the distal upper limb from maximum flexion to maximum extension.</li> </ul> |  |  |
| Assessment of Elbow Flexors: Circle the correct measurement. |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |  |
| Left                                                         | Right |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |  |
| 0                                                            | 0     | No increase in muscle tone. Normal muscle tone.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |  |
| 1                                                            | 1     | Slight increased in tone, manifested by a catch and release or by minimal resistance at the end of the range of motion when the affected part is moved in flexion or extension. [4 <sup>th</sup> QUARTER]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |  |  |
| 1+                                                           | 1+    | Slight increased in tone, manifested by a catch, followed by minimal resistance throughout the remainder (less than half) of the range of motion. [3 <sup>rd</sup> QUARTER]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |  |
| 2                                                            | 2     | More marked increase in muscle tone through most of the range of motion, but affected parts are easily moved.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |  |
| 3                                                            | 3     | Considerable increase in muscle tone; passive movements difficult.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |
| 4                                                            | 4     | Affected part rigid in flexion or extension.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |  |

| <b>MODIFIED ASHWORTH SCALE (MAS)</b>                         |                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                             |  |  |
|--------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| Assessment of the Wrist Flexors                              |                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                             |  |  |
| Date:                                                        |                                                                                                                                                                                               | <ul> <li>For the purposes of this study:</li> <li>Patient is supine. Opposite arm is in a comfortable position for the patient. Head is midline &amp; resting on the examination table.</li> </ul>                                                                                                                          |  |  |
| Number:                                                      |                                                                                                                                                                                               | • Hold the forearm posteriorly on the distal 1/3 just proximal to the wrist joint keeping the forearm propated                                                                                                                                                                                                              |  |  |
| Investigator                                                 | :                                                                                                                                                                                             | <ul> <li>The examiner's thumb is placed on the midpoint of the dorsal surface on the patient's 3<sup>rd</sup> metacarpal. The examiner's fingers are placed on the patient's mid-palm, allowing the patient's fingers to be free during the evaluation.</li> </ul>                                                          |  |  |
|                                                              |                                                                                                                                                                                               | <ul> <li>The examiner rates the resistance while extending the wrist, over a duration of about <u>one second</u> (by counting "one thousand one"), moving the wrist from maximum flexion to maximum extension.</li> <li>Repeat the measurement 5 to 8 times (choose the most reliable / consistent measurement).</li> </ul> |  |  |
| Assessment of Wrist Flexors: Circle the correct measurement. |                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                             |  |  |
| Left                                                         | Right                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                             |  |  |
| 0                                                            | 0                                                                                                                                                                                             | No increase in muscle tone. Normal muscle tone.                                                                                                                                                                                                                                                                             |  |  |
| 1                                                            | 1Slight increased in tone, manifested by a catch and release of<br>minimal resistance at the end of the range of motion when<br>affected part is moved in flexion or extension. [4th QUARTER] |                                                                                                                                                                                                                                                                                                                             |  |  |
| 1+                                                           | 1+Slight increased in tone, manifested by a catch, followed b1+inimial resistance throughout the remainder (less than half) of thrange of motion.[3rd QUARTER]                                |                                                                                                                                                                                                                                                                                                                             |  |  |
| 2 2                                                          |                                                                                                                                                                                               | More marked increase in muscle tone through most of the range of motion, but affected parts are easily moved.                                                                                                                                                                                                               |  |  |
| 3                                                            | 3                                                                                                                                                                                             | Considerable increase in muscle tone; passive movements difficult.                                                                                                                                                                                                                                                          |  |  |
| 4                                                            | 4                                                                                                                                                                                             | Affected part rigid in flexion or extension.                                                                                                                                                                                                                                                                                |  |  |