

Muscle tonus and posturography assessment protocol

- Informed consent
- Pre trial questionnaire
- Electrode placement (and take photos if patient consented)
 - External oblique
 - *Rectus abdominis*
 - Iliocostalis
 - Multifidus
- Lay the test subject on a stretcher, belly down
- Ask the test subject to rest for 15 seconds
- Slide the test subject off the stretcher up to the waist
- While holding the legs and shoulders, ask the test subject to rise up (x2)
- Ask the test subject to stand up on the force platform
- Ask the test subject to extend their arms, perpendicular to the feet orientation, for 15 seconds
- Ask the test subject to stand still on both feet with their eyes open for 30 seconds
- Ask the test subject to stand still on both feet with their eyes closed for 30 seconds
- Ask the test subject to stand still on the right foot with their eyes open up to 30 seconds
- Ask the test subject to stand still on the right foot with their eyes closed up to 30 seconds
- Ask the test subject to stand still on the left foot with their eyes open up to 30 seconds
- Ask the test subject to stand still on the left foot with their eyes closed up to 30 seconds
- Ask the test subject to extend their right arm parallel to their feet
- Measure the distance between their shoulder and third metacarpal
- Place an object 15cm from the furthest point reached without leaning forward, at approximately the hip-femur junction height
- Pick up the object using the opposite hand
- Repeat for right, left and central position (in the case of the central position use the dominant hand)
- Ask the test subject to bend forward until the back forms an approximate 90° angle
- Place an object near the position of the shoulders and approximately knee height

- **Ask the test subject to pick up the object**