

Wrist proprioception exercises

Proprioception is the sense that allows us to know where our body parts are and what they are doing without having to look at them.

Sensors in our muscles, skin and joints send messages to the brain which creates movement. Injury, pain and immobilisation can affect these messages, meaning that our muscles are not working correctly to control our movements. This can result in pain and reduced function.

Proprioception exercises can help to improve the transmission of messages between our sensors and muscles, thereby improving pain and function.

This leaflet contains a progression of proprioception exercises. You should only do the exercises that your therapist has advised you to do.

OUR VALUES

Patient-centred
and safe

Professional

Responsive

Friendly

Basic exercises

1. Mirror therapy

Sit or stand next to a mirror with your affected (painful) wrist and hand behind the mirror. Position your unaffected hand so that it looks like your affected hand in the mirror.

Perform pain free movements with both hands, focusing on the reflection in the mirror.



Practice for _____ minutes, _____ times per day.

2. Joint position sense matching

Close your eyes and rest your elbows on the table. Move your unaffected wrist and hand into a comfortable position. Keeping your eyes closed try to copy this position with your affected (painful) wrist and hand. Repeat in different positions.



Practice for _____ minutes, _____ times per day.

For wrist proprioception exercises to be effective they require concentration and they must be performed with the correct technique. You will not see immediate results or reduction in pain levels by doing these exercises.

Remember to only do the exercises that you have been advised to by your therapist.

If the exercises are making your pain worse, stop doing them and contact your therapist.

Your therapist's name is

Burns and Plastics Physiotherapy
Department
Plastic Surgery Outpatients
Salisbury District Hospital
Salisbury, Wiltshire, SP2 8BJ
Tel: 01722 345530

OUR VALUES

Patient-centred
and safe

Professional

Responsive

Friendly

Additional exercises/advice:

3. Wrist balance

Fill a hot water bottle or rubber glove with cold water and place it on the table. Place your affected (painful) hand on the hot water bottle or glove and apply gentle pressure so that you are moving the water in the glove to your fingers, heel of hand, thumb and little finger.



Practice for _____ minutes, _____ times per day.

Isometric strengthening exercises

1. Flexor Carpi Ulnaris (FCU)

Rest the forearm of your affected wrist on the table with your palm facing up. Bend your wrist up towards the ceiling resisting with your other hand so that it does not move. You should resist on the little finger side of the hand.



Hold for ___ seconds, repeat ___ times, ___ times per day.

2. a) Extensor Carpi Ulnaris (ECU) with palm up

Rest the elbow of your affected wrist on the table with your hand facing you. Try to bend your wrist backwards (away from you) resisting with your other hand. Make sure you are not trying to straighten your elbow.



Hold for ___ seconds, repeat ___ times, ___ times per day.

5. Gyroscope

Your therapist may recommend that you purchase a piece of equipment called a gyroscope/powerball for further wrist strengthening. If this is the case you will be advised how to use it.



Practice for _____ minutes, _____ times per day.

3. Ball on tray

Balance a small light tray on your affected hand with your palm facing up. Place a ball in the middle of the tray and try to keep the ball still.

This can be progressed to moving the ball slowly and with control to the corners of the tray.



Practice for _____ minutes, _____ times per day.

4. Silk scarves

Hold a lightweight silk scarf or piece of tissue paper in your affected hand. Throw it into the air and catch it on its way down.



Practice for _____ minutes, _____ times per day.

b) Extensor Carpi Ulnaris (ECU) with palm down

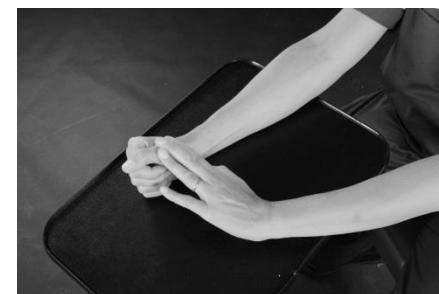
Rest the forearm of your affected wrist on the table with your palm facing down. Try to bend your wrist towards your little finger resisting with your other hand.



Hold for ___ seconds, repeat ___ times, ___ times per day.

3. Abductor Pollicis Longus (APL)

Rest the forearm of your affected wrist on the table in a 'handshake' position. Apply resistance with your other hand at the base of your thumb and try to bend the wrist up so that your hand lifts off the table up towards the ceiling.



Hold for ___ seconds, repeat ___ times, ___ times per day.

4. Extensor Carpi Radialis Brevis (ECRB)

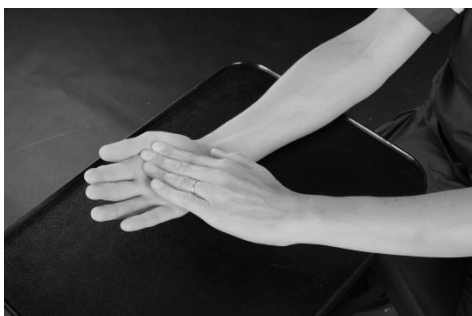
Rest the forearm of your affected wrist on the table with your palm facing down, fingers bent. Apply resistance to the back of your hand with your other hand and try to bend the wrist back against the resistance.



Hold for ___ seconds, repeat ___ times, ___ times per day.

5. Flexor Carpi Radialis (FCR)

Rest the forearm of your affected wrist on the table with your palm facing up. Bend your wrist up towards the ceiling resisting with your other hand so that it does not move. You should resist on the thumb side of the hand.



Hold for ___ seconds, repeat ___ times, ___ times per day.

Unconscious strengthening exercises

1. Weight bearing

Lean on your hands either on a wall or the floor. Slowly shift your weight from side to side between your hands. You can make it harder by adding a press up movement.



Practice for _____ minutes, _____ times per day.

2. Forearm rotation

Hold the bottom of a rolled up magazine, rolling pin or squash racquet in your affected hand with your elbow bent to 90 degrees by your side. Slowly rotate your forearm drawing a smooth semicircle in the air. Make sure you are not gripping the object too tightly.



Practice for _____ minutes, _____ times per day.