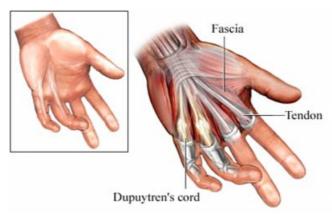


# Dupuytren's Disease

# What is it?

**Dupuytren's Disease** is a genetic disorder affecting the connective tissue of the palm of the hand. Established contractures are irreversible and require surgery.



## Signs and Symptoms

- The first sign is often a small lump or puckering of the skin which can progress into a thickened fascial band or "cord".
- The thick cord of fascia pulls the fingers in toward the palm.
- Often occurs in both hands and the soles of the feet and is most common in the Little finger and the Ring finger.
- The condition is painless and benign for most, however, those that use their hands for heavy gripping, and manual handling tasks, can exacerbate the condition.

## Causes

The exact cause of Dupuytren's is unknown. One theory is that it descends from the Viking era. The condition can also present following trauma to the fingers, hand and wrist.

## Incidence

Dupuytren's most frequently occurs in men over the age of 40 and people of Northern European descent.



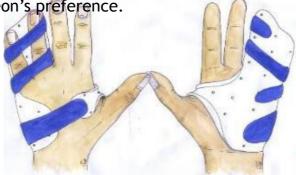
# Surgery

There are 2 main surgical interventions:

- 1. **Fasciectomy** A 'Z' shaped incision is made into the palm / fingers and the Dupuytren's tissue is removed.
- 2. Needle Fasciotomy A needle is used to cut the Dupuytren's tissue and break the cord.

# Post - Surgery Treatment

• **Splinting** will help prevent the contracture recurring as the wound heals and the scar matures. Night splinting is required for 12-16 weeks post-operatively depending on the severity of the condition and the surgeon's preference.

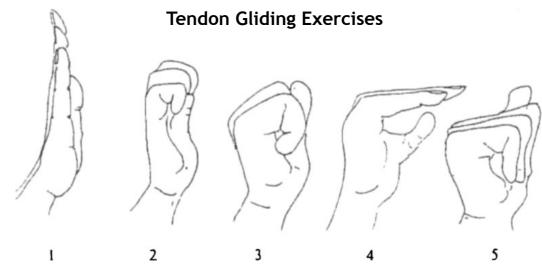


A compression glove may be provided to reduce swelling and provide pressure to the palm, particularly following a Collagenase injection.



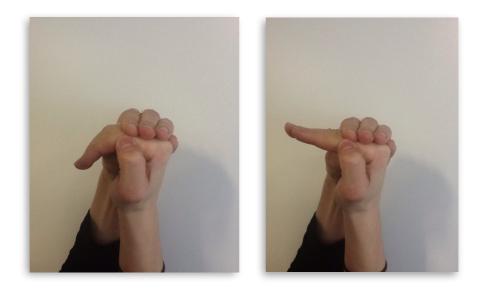
- **Tendon Gliding Exercises** help prevent scar adhesions and maintain joint range of motion.
- Ultrasound, Low Level Laser Therapy, scar massage and silicone may be used to assist with remodelling of scar tissue.
- Strengthening exercises are provided to assist you to return to full activities.





- 1. Start with your fingers straight for each set of exercise.
- 2. Make each type of fist ten times.

# **Blocked Extension**



- 1. Bend your knuckles on the effected hand and form a hood over the top with your other hand. Relax the fingers in a slightly bent position.
- 2. Straighten the end two joints of your fingers to make a 'duck beak' position.
- 3. The other hand should be applying resistance on the hood so that the fingers are actively straightening.

# Do these exercises at least three times every day, preferably every 1-2 hours.



#### OEDEMA MANAGEMENT:

- A compression glove may be provided to reduce swelling and assist with comfort post operatively
- A soft gel ice pack may be placed over the back of your hand for 5-10 minutes, three times a day place a barrier in between to avoid direct contact with the skin
  - Keeping your ice pack in the fridge rather than the freezer may help if you are cold-sensitive
- Elevating the affected limb on the arm of a chair or the couch; aiming to keep the hand above the elbow, and the elbow above the heart. This assists with the drainage of oedema.
- When out walking, place your hand in your jacket pocket to keep it elevated.
- Gentle retrograde massage from your fingertips to your elbow shoulder, with the same amount of pressure that you would pet a cat. This may also assist with controlling swelling.

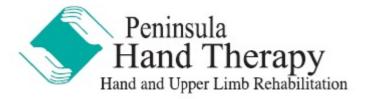
#### SCAR MASSAGE:

Start massaging your scar with moisturiser when instructed by your therapist. The massage will help flatten and loosen your scar as well as decrease any sensitivity you may have over the area.

Complete for 5 minutes, 3 times per day

#### **PRECAUTIONS:**

- No lifting, pushing or pulling anything greater than 0.5 kilograms; e.g. a cup of tea. With progressive increase in load from week four onwards
- No weight bearing on the outstretched hand until week six.
- No tight gripping/grip & twist (e.g. opening jars) until week six.
- **Driving:** You are fit to drive when you can make a confident fist, and feel safe to react suddenly in an emergency situation.



# Post Operative Exercises - Week 4:



Forearm Stretch # 1 TIP: Spread your fingers wide when performing stretch.

You should feel a stretch on the inside of your forearm.



Forearm Stretch # 2 TIP: Grasp fingers close to the hand joint

You should feel a stretch in your palm or forearm

Hold for up to 30 sec



#### Webspace Exercise

Interlock your fingers, with your affected hand underneath and repetitively bend your fingers, ensuring you maintain the webspace between each finger.