DUPUYTREN'S DISEASE/CONTRACTURE



This is a condition affecting the hands and fingers. It starts with a lump in the finger or palm and gradually extends to create a cord that spans across the palm and digit. It gradually shortens and causes a contracture in the digit involved. The digit cannot be straightened by stretching it and affects the ability to open the hand enough to hold objects, and can also cause problems donning gloves or putting the hand in a pocket.

It is a benign condition affecting the fascia of the hand, a layer just deep to the skin. It does not normally affect the tendon and the finger can move to a certain extent. Once it has grown it will not resolve itself. It can take years to progress to a contracture but sometimes this can be within just a few months.

Usually there is no specific cause identified, but factors include northern European heritage, family members with the condition, smoking, excess alcohol intake, liver disease, certain medications, and previous trauma to the hand.

SURGERY

Once the disease has established itself and a contracture has developed it cannot be improved by stretching, physiotherapy, or splints. Surgery is the most reliable way of treating the condition. I do not recommend collagenase injections (Xiapex) as, although it is much less invasive than surgery, the literature suggests chances of the condition returning within the next two years are 50% or more, and effects are generally short lived. In contrast, the chance of the condition being successfully treated with surgery with no recurrence is 90%.

Surgery is usually carried out under general or regional (injections around the upper arm to numb the whole arm) anaesthetic as a day-case procedure so you may return home the same day.

A cut is made in the skin and the diseased tissue removed. There are very fine structures including the nerves and blood vessels supplying the skin and digits that are risk and need to be carefully dissected out of the diseased tissue. Depending on the severity of the disease the tissues around the joints of the fingers such as ligaments may also need to be released.

As with any surgery there are risks, but this is generally a safe procedure. Risks include infection, numbness, stiffness, weakness, swelling, scar healing problems or sensitivity, recurrence, continued contracture, and injury to the blood vessels resulting in amputation. All these risks are rare, and surgery is usually very successful with no complications.

What to expect after surgery

Dressings

Your hand will be bandaged with a "wool and crepe" layered bandage. This bulky dressing minimises swelling and makes you feel more comfortable. The wound is protected and the hand gently immobilised. The bandage should remain intact and dry until you are seen in the clinic for a wound check at around 7-10 days.

Stitches/Wound

Dissolving stitches are usually used, that do not need to be removed. Although the wound heals within the first two or three weeks after surgery, the scar continues to mature for up to 6-8 months. In the first 6 weeks it is often pink/red, firm and tender. This is normal, and regular massage of the scar with a simple moisturising cream as soon as the wound has healed will speed up the scar maturation and your recovery.

Painkillers

You might experience some pain/discomfort once the anaesthetic has worn off (most commonly 4-6 hours after the operation). You should take the painkillers as prescribed before the anaesthetic has fully worn off, as they will be most effective this way.

Elevation

Your hand should be elevated in such a way that the <u>wrist is above elbow</u> level, i.e. there is a downward slope from the hand towards the elbow to allow gravity to help reduce any swelling. It is usually easy to keep the hand elevated, but some people need a sling to help them during the day; it is essential to rest your hand sloping on pillows or on your chest when in bed. In the first couple of weeks the hand is usually a little swollen. Please remember not to keep the hand hanging down or sit with your hand held down in your lap.

Exercises

Remember to continue light duties and move your fingers, elbow and shoulder joints in order to prevent stiffness. Even while in the hand bandage, try the following finger exercises as soon as possible:

- straightening the fingers completely
- making a claw and a fist with the fingers
- spreading the fingers as wide as possible
- touch each of your fingertips with the tip of your thumb

Of course, some of your fingers may be bandaged together but please still attempt to move them and keep stretching them. You will not damage the wound by trying to gently stretch your fingers.

Returning to work

Timing of your return to work is variable according to your occupation and the extent of surgery.

You should not drive whilst your hand is bandaged and splinted. Most patients find driving difficult for at least 3-4 weeks after surgery, often longer.