

## DUPUYTREN'S CONTRACTURE

Dupuytren's contracture is a thickening of deep tissue (fascia), which passes from the palm into the fingers. The fascia becomes thickened into *nodules* and the appearance of longitudinal *cords* causes the onset of contracture, which pull the fingers into the palm.

The disease is often genetic and may indicate that you have Viking ancestry! It is commoner in males and in people that are diabetic, epileptic, who have liver disease or those who have injured the hand. Both alcohol consumption and smoking increase the risk of its appearance. Its progression is unpredictable but its appearance at an early age (<40years), particularly if there is a strong family history, predicts an aggressive course with multiple operations.

The condition is progressive and the standard treatment is surgery. The timing and type of surgery requires judgement and discussion. Nodules are generally best left alone even if they are a bit of a nuisance. Surgery is delayed until the fingers start to be pulled inwards. Results are poor if the fingers are allowed to become very bent. There are a number of techniques that can be combined.

**Collagenase** Injection of this enzyme into the cords causes the Dupuytren's tissue to dissolve. It is particularly suitable for very well-defined cords and early disease.

**Fasciotomy** The cords are cut through small cuts in the palm either with blade or needle (needle aponeurotomy). Also suitable for very well-defined cords, palmar involvement, mild contractures or patients who are unfit/unsuitable for more complicated surgery. Although recovery is fast, it has complications and a higher recurrence rate than other techniques.

**Fasciectomy** Correction is usually done by removal of the fascia. The entire wound is stitched up in a zigzag manner which lengthens it but occasionally, a segment of the wound is not stitched, being left open to heal by itself (open-palm technique).

**Dermofasciectomy** In some situations the fascia is removed with the overlying skin. (a) Where the skin is also obviously affected by the disease (the skin is stuck to the cords/nodules and cannot be moved over them). (b) When the problem has come back after previous surgery. (c) In young patients (20-40yr) who almost always have recurrence after fasciectomy. Dermofasciectomy is a more complicated operation which takes longer to recover from because the removed skin has to be replaced by a skin graft but offers a lower recurrence rate

**Amputation** Unusual but may be preferred in a finger with a very severe contracture, after multiple recurrences and where there has been previous nerve and vessel damage.

Possible complications include: -

**Wound** Possible problems include swelling, bruising, bleeding, blood collection under the wound (haematoma), infection and splitting of the wound (dehiscence).

**Scar** You will have a scar on the palm and/or finger (and in the inner arm if you have a skin-graft).

**Nerve damage** The nerves running to the fingers can be damaged during the surgery and cause numbness in part of the finger. This complication is unusual in unoperated areas but becomes more common during repeat operations.

**Recurrence** Dupuytren's contracture is never cured. It can return either at site of surgery or elsewhere in the hand. Its behaviour can be compared with weeds in the garden.

**Regional pain syndrome** About 5% (1 in 20) of people are sensitive to hand surgery and their hand may become swollen, painful and stiff after the operation. This problem cannot be predicted, is variable in severity and is principally treated with physiotherapy.

**Correction** It is often not possible to fully straighten fingers which are very bent at the time of operation, particularly if much of the bend occurs in the middle joint of the finger (PIPJoint). This can sometimes be improved with splinting later after the operation.

**Skin loss** Portions of the zigzag scars and skin grafts can die or fail to "take" after the operation. This is unusual if you do not smoke and follow all the advice given.

**Finger loss** This is extremely rare but can occur in fingers which are either very bent or have had many operations before and in patients who have diseases of blood vessels such as diabetes.