

Dupuytren's Disease

Dupuytren's disease is a condition in which the layer of tissue under the skin in the palm of the hand and fingers thickens and shortens. This in turn results in restriction of finger movement and progressive contraction of the involved fingers towards the palm.

In advanced cases this may be particularly disabling. It is not a dangerous disease and is painless. It uncommonly may affect other parts of the body such as the sole of the feet.

Although the cause is unknown, there is a strong hereditary component. It does not usually appear until middle or late in life. The condition is not thought to be related to injury or occupation.

Disease Progression

Dupuytren's disease usually begins as a small lump or pit in the palm of the hand. It tends to develop slowly over time and forms a cord of tissue which may be felt beneath the skin. It results in puckering of the overlying skin. It most commonly affects the ring and little fingers although all fingers may be involved to a variable extent.

As the cord thickens it also shortens and the finger can no longer be fully straightened. With further progression the finger is drawn down toward the palm and the patient will notice decreased ability to place his or her palm around cups and the contracted finger will frequently get caught on pockets. Skills requiring fine dexterity will become increasingly difficult.

Treatment

There is no known cure for Dupuytren's contracture. Surgery is used to remove the contracted tissue beneath the skin to allow for straightening of the fingers. Despite extensive surgical removal the condition may recur.

The aim of surgery is to maximise hand movement and function. Occasionally in long standing severe disease it is not possible to fully straighten the small joints of the finger, although significant improvement can be expected. Timing of surgery depends on a number of factors including the age, functional requirements of the patient and the extent of the disease.

The surgical treatment is essentially resection of the contracted scar tissue via incisions on the palmar aspect of the hand and fingers. The scar tissue that forms with this disease frequently wraps itself around the small nerves supplying the finger and these are therefore 'at risk' during surgery, however injury to these nerves is assiduously avoided and as a result is a rare occurrence. It is occasionally necessary to use a skin graft at the end of the procedure. At the end of the procedure drains may be placed under the skin and these are removed with the change of dressing within the first week. The patient usually is required to stay in hospital overnight. Driving is usually difficult for the first two weeks.

Post operatively the hand and forearm are supported by a plaster splint. The hand is elevated and movement of the fingers is encouraged to minimise swelling of the hand which may jeopardise wound healing. The wound is reviewed in the rooms after one week at which time the sutures are removed. Hand therapy may be required at this time.