

Dupuytren's Disease

What is it?

Dupuytren's disease is a progressive thickening of the palmar fascia of the hand, commonly affecting the ring finger and little finger of one or both hands with progressive flexion of these joints. It commonly affects males over the age of 40 years and women are commonly affected less frequently. In many patients, we do not know why Dupuytren's disease occurs, but it is said to be a disease of patients who have Viking heritage. We expect there is some genetic basis for the development of this disease.

What are the symptoms?

There is thickening and development of cord-like structures across the palm of the hand, usually to the ring finger and little finger, although any finger may be affected. As this progresses, the fingers roll up into the palm and this stops completely straightening of the fingers. This is occasionally tender but as the disease progresses, this is usually a painless condition.

Clinical examination

The disease is usually easy to diagnose as it has characteristic examination findings as described above. A simple test called the Hueston's tabletop test is used to determine whether surgery should be performed. In this test the hand is placed flat on the table and if the patient is unable to make their palm flat on the table this often suggests there is a level of disease which should be considered for surgery.

What investigations are required?

No investigations are routinely ordered for Dupuytren's disease.

What are the treatment options?

There are two main options for treatment of Dupuytren's disease. These are:

Non-operative

Many patients enquire about non-operative treatment, including night splinting but this has not been shown to significantly alter the course of the disease. Further non-operative treatment may include a collagenase injection, which is a relatively new treatment to Australia and studies are still being performed to evaluate its usefulness. This option will be discussed at your consultation but please be aware only select patients will be suitable for this treatment.

Operative

Surgery is usually performed under a day-case procedure under a general anaesthetic. The procedure usually takes between 30 and 60 minutes to perform. A tourniquet is placed above the elbow to ensure a bloodless field. A zigzag incision is made along the palm and out to the finger. Skin flaps are elevated, and the tendons, nerves and arteries are identified and protected. The cord causing the contracture is identified and removed. Occasionally a skin graft may be required if there is a significant skin defect on closure of the skin flaps. The skin is sutured closed, and dressings and a plaster of Paris cast is applied. The patient's hand is immobilised inside the cast and this is usually required for 5-10 days. The wound is inspected at 5-10 days post-surgery and the sutures are usually removed at 10-14 days post-surgery. A further splint is organised by the hand therapist.

Post-Operative Rehabilitation

After the sutures are removed at 10-14 days a splint is organised to avoid early recurrence of the contractures. A separate splint is also organised to be worn at nighttime for a further three months. Patients can return to most activities of daily living once the sutures have been removed. Patients can return to light work environments once the sutures have been removed, however heavy manual labour is often delayed for 4-6 weeks.

Possible complications

Overall, greater than 95% of patients are happy with the results of the surgery, however complications do occur sometimes.

Some complications specifically related to hand surgery include infection (less than 1% chance), neuroma (less than 1% chance) which is a damaged nerve that becomes painful on reattempts to regenerate, numbness, chronic regional pain syndrome or reflex sympathetic dystrophy (1-2% chance) which is a reaction to surgery which can cause painful or stiff hands.

Complications specific to Dupuytren's contracture surgery include recurrence, which is common, however the recurrence may not occur to the level that requires further surgery. Occasionally the surgery is unable to completely straighten the finger, especially in recurrent disease. Sometimes blood vessels and nerves in the finger may be damaged and leave one side of the finger numb or alter the blood supply to the finger. There may be specific wound breakdown of more complex incisions and more advanced disease.

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