

Patient Information Sheet

Dupuytren's Disease

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What is Dupuytren's Disease?

Dupuytren's disease is an abnormal thickening of the tissue just beneath the skin on the palmar surface of the hand. It can start off as nodules but go on to involve the fingers, causing them to curl in and the patient is unable to straighten them completely. The problem can be progressive. Both hands may be affected and sometimes there is thickening of the skin over the knuckles on the back of the hand. Dupuytren's disease has a genetic basis, is commoner in individuals of northern European ancestry and often runs in families. The work from my laboratory has shown that it is a localised inflammatory disorder dependent on the local production of the cytokine called tumour necrosis factor (TNF). The disease is definitely not cancerous but can come back following treatment.

<http://www.pnas.org/content/110/10/E928.full.pdf>

<https://www.youtube.com/watch?v=T7VnrFtGnfY>

I am leading a phase II clinical trial assessing the efficacy of anti-TNF therapy in patients with early disease, for which there is currently no approved treatment.

<http://www.ndorms.ox.ac.uk/clinical-trials/current-trials-and-studies/ridd>

Diagnosis

The diagnosis is made on the basis of the history and the clinical examination. Special tests are not necessary.

Treatment

Treatment is when the disease is sufficiently advanced to interfere with daily activities such as wearing gloves and the hand can no longer be placed flat on the table. The commonest procedure in the UK remains surgical excision of the diseased tissue although less invasive techniques such as needle fasciotomy or collagenase are becoming increasingly popular. The latter have higher recurrence rates at 3 years of 70% and 35% respectively, compared to ~12% for surgical excision. Operating on immature Dupuytren's cords tends to lead to a poorer outcome and there is currently no approved therapy for patients with early disease, although some advocate radiotherapy or local steroid injection.

Surgery is performed under general anaesthesia. The thickened tissue is removed and the skin is closed in a zigzag manner to prevent scar contractures. This usually means incisions in the palm and into the affected fingers. The transverse palmar incision is left open to allow more rapid rehabilitation and reduce the risks associated with bleeding and it heals rapidly with dressings over a period of about 3 weeks. If the palmar skin is heavily infiltrated or if surgery is for recurrence of the problem, it may be necessary to replace the skin with a full-thickness skin graft from the groin. The grafted skin looks like it originated from the groin and maintains its texture and pigmentation but the Dupuytren's disease almost never recurs under a skin graft.

After surgery

The stitches are left in for approximately 2 weeks. The hand must be kept dry during the first week. You can bathe by placing a plastic bag over the hand. The dressings are changed regularly during this period. A long-acting local anaesthetic is also used at the time of surgery to provide postoperative pain relief. The numbness lasts for several hours and simple pain killers are all that are necessary afterwards. It is very important you keep your hand elevated as much as possible, at least during the first week. During the daytime you can wear a sling and at night the hand can be rested on a couple of pillows. This helps reduce the swelling and postoperative discomfort. It is essential that you keep your fingers moving during this period and come out of the sling every few hours to exercise your elbow and shoulder. If required, the hand therapist will fit you with a plastic splint to be worn at night for 3 months post-operatively. This helps prevent scar contracture. When a skin graft is necessary, a plaster of Paris splint will be fitted at the time of surgery and this is removed when the graft dressing is taken down.

Possible complications

- Sometimes it is necessary to continue with dressings if the incisions are slow to heal, particularly when a skin graft is used.
- Even after surgery, the Dupuytren's tissue can grow back in the same place or affect another digit.
- In some patients, the nerves which supply sensation to the fingers are embedded in the diseased tissue and have to be carefully dissected out. This can result in bruising of the nerves, which manifests as temporary numbness.
- In difficult cases, for example where multiple operations have been performed previously, the nerve can be injured, resulting in permanent numbness on that side of the finger. Every care is taken to avoid this.
- Some patients develop thickened scars and this can necessitate prolonged rehabilitation and may cause the finger to bend back down
- Complex regional pain syndrome, which presents as pain, swelling, stiffness and discolouration, is uncommon and is treated by intensive hand therapy and appropriate pain control.