CONDITIONS

DUPUYTREN's DISEASE

Dupuytrens disease is caused by a progressive thickening and tightening of the tissue between the skin and the tendons in the hand. The disease most commonly begins as a lump or nodule in the palm of the hand. Patients usually consult a hand surgeon once they have developed a cord of thick tissue running into a finger. Surgery is appropriate for patients who have developed a bent stiff finger-joint, or for significant pain (an uncommon finding) or for patients who have lost critical function in the hand. Generally a bend in the finger joint (contracture) of at least 30 degrees may benefit from surgery. Patients who cannot put the affected hand into a pocket, who cannot wear gloves or who cannot lay their hand flat onto a table-top can consider surgery. Finger joints that become very bent (more than 90 degrees) tend to do less well after surgery than those joints operated on earlier in the course of the disease.

Surgery is performed under local anaesthesia or under a regional block (injections to numb the arm), as a day-case procedure. The surgical wounds are closed with a combination of absorbable and non-absorbable nylon sutures. The hand is wrapped in a padded bandage. Patients need to return at 12 days after surgery for suture removal. The surgical wounds need to be kept dry for 3 weeks, there after patients should massage moisturiser onto the hand

There are several potential operations:

Fasciectomy
During surgery the diseased tissue (fascia) extending up the finger from the palm is removed. The skin and the neurovascular bundles (the digital nerves and artery on each side of the finger) are carefully dissected away from the cords of thickened tissue. Severe contractures of the proximal interphalangeal joint (the first joint in the finger) can be partially corrected by stretching dring surgery, or by division of the small "check-rein ligaments" which anchor the finger in a bent, contracted posture.

Fasciectomy is a good reliable operation but can be associated with a disease recurrence rate of between 10 and 30% at five years.

Dermofasciectomy
Mr Grant uses this technique for recurrent disease, or for those patients with diffuse skin involvement (characterised by pits and nodules within the skin). It is more commonly needed for the small finger. The operation is performed under a regional block or short general anaesthetic. The dense fibrosis is removed along with the skin of the palmar surface of the finger, which is replaced with a full thickness skin graft (usually taken from the upper arm). The skin graft donor site is closed with absorbable sutures, the graft is held in

place with a “tie-over” dressing sutured in place for between 10 and 14 days. Graft failure is extremely rare, the new skin has a different colour and texture to the surrounding palm skin but is usually an improvement compared with the tight, thickened skin normally seen in advanced Dupuytren’s disease.

Dermofasciectomy is a larger operation but is extremely reliable and can be associated with a recurrence rate as low as between 5 and 10% at five years.

ALTERNATIVES TO SURGERY

Needle fasciectomy

The tight diseased tissue can be divided by short cuts through the skin made using the sharp end of a hypodermic needle. This can be done under local anaesthetic in the out-patient office. In Mr Grant’s practise the technique is reserved for patients too infirm to under go more extensive surgery, or in whom severe deformity of the hand prevents normal hand hygiene. The technique is to some extent blind: nerves or blood vessels can be pulled by the disease process into the midline of the digit, and can be potentially be inadvertently damaged by the needle. Recurrence rates are relatively high.

Splintage, ointments, steroid injections.

In Mr Grant’s opinion non-surgical strategies are not adequately effective in the treatment of Dupuytren’s disease.