

The Hand Patient

A Selection of Case Studies for Quick Reference

Having had the pleasure to teach and train students for many years, and the privilege of having patients referred to me by ex-student General Practitioners, one realizes that medical school training can only impart but a general overview of knowledge. It is impossible and unfair to expect of any medical student to "know it all".

For this reason continuing medical education, or Continuing Professional Development (CPD) as it is now known in South Africa, is imperative.

This post-graduate training should however, be presented in such a way that the busy practitioner readily has access to the relevant information in a succinct form and in an understandable jargon.

Communication between the referring doctor and the specialist should not only include information regarding that particular patient, but should also contain some informative detail on the pathology and management.

This continuing education is part of the responsibilities of a consultant specialist.

It is sincerely hoped that this edited collection of selected case reports will promote a well-informed communication between the practitioner and his/her "hand patient".

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Dupuytren's Contracture

Dear Colleague

RE: YOUR PATIENT WITH HARD NODULES IN BOTH HANDS REFERS.

Thank you for the referral of Mr D C, a 61-year-old right handed executive manager who complains of hard nodules in both his palms, which have been present for the past two years. He has noticed that the small finger on the right hand started to flex about six months ago. This is annoying in his everyday work and becomes embarrassing when he greets people. He also has difficulty in putting his hand into his pocket and washing his face. He does not have any pain in the hands. History into previous injuries or diseases does not reveal anything of note.

On **examination** Mr D C clearly has multiple nodules and tight bands in

both his palms which is more pronounced in the right hand. The small finger has flexion contracture at the MP and the PIP joint. The flexion contracture is not correctable at the PIP joint which stands at about 80° of flexion. Further examination does not reveal any neurovascular abnormalities.

Since this is a soft tissue condition, **special investigations** were not deemed necessary.

The **diagnosis** is Dupuytren's contracture, alternatively known as palmar fasciitis.

The **management** would initially be conservative to delay flexion contractures of the fingers as long as possible. Sitting on the hand or stretching on a regular basis could be helpfull. However, this measure is of limited value only. No other

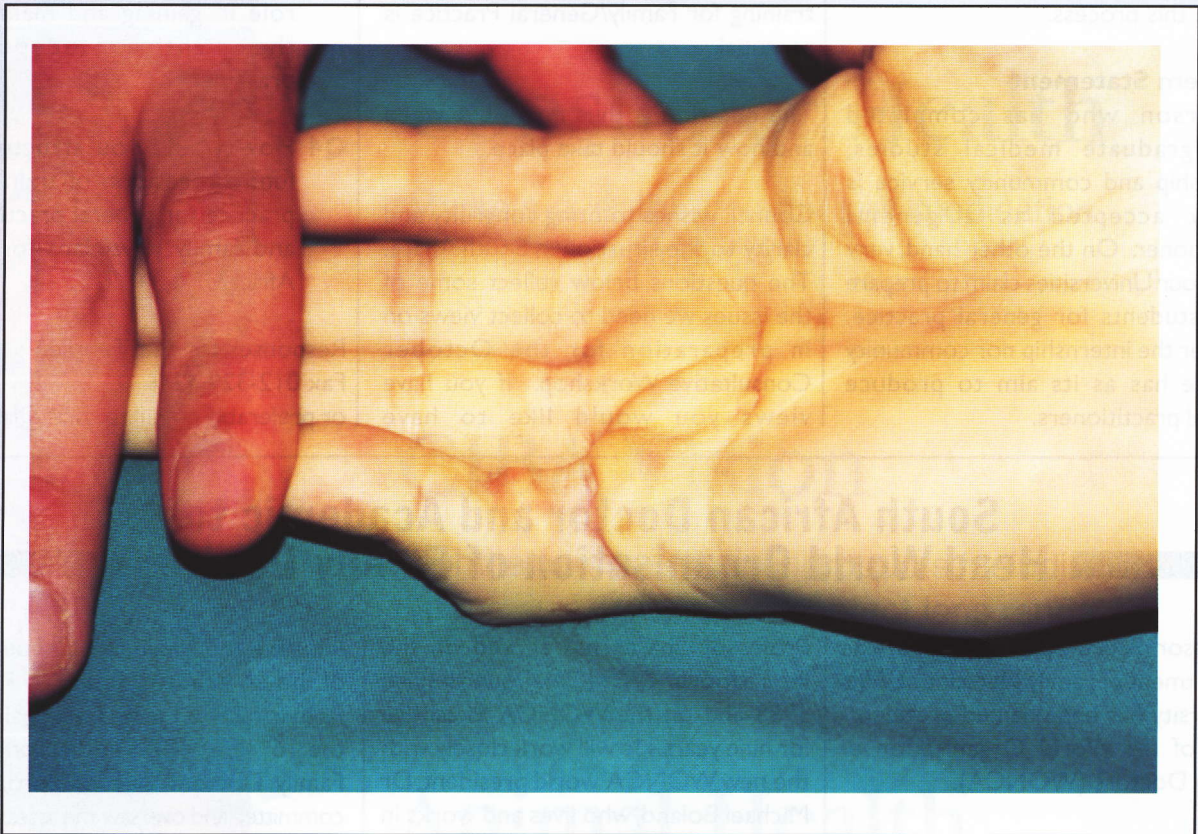
conservative measurements have been successful which includes local injections with steroids and splinting. Since the flexion contracture has become an annoying problem to the patient, surgical excision of the nodule and fibrous band is the only solution. This will involve a longitudinal incision over the fibrous band and removal of all the affected palmar fascial tissue including the band and the nodules. The present day accepted extend of surgical removal would involve only the affected fascia. Once the bands are removed, it may be necessary to include an arthrolysis of the PIP joint of the small finger to enable straightening of that digit. Multiple Z-plasty is advisable to break the skin scar, and which has a limiting effect on the recurrence of the condition. Complications during surgery may include damage to the neurovascular bundle since these are

often pushed out of their anatomical site. It is therefore necessary to do the surgery under a bloodless field with magnification. Furthermore, every little bleeder seen should be cauterized to prevent post-operative haematoma formation. One should also warn the patient that in some cases a reaction to the surgery might cause the so-called post-operative Dupuytren's flare. This serious condition is recognized by a thick skin with very hard scar tissue which is sensitive to touch. Hand therapy is advised from day 7 after surgery to counter this severe complication. One should also notify the patient that recurrence of the conditions is always a possibility. However, most patients do well, but hand therapy instituted early for at least 12 weeks is strongly advised.

DISCUSSION:

The etiology of Dupuytren's contracture is not yet known. However, a link is drawn to people from Anglo-Saxon descent, especially from Scotland. A definite link exists with a Viking ancestry. A number of conditions have been blamed for this disease, such as alcoholism, epilepsy, manual labor and even diabetes. However, this has never been proved. A Dupuytren's contracture can also present on the instep of the feet (Lederhose disease) and other places such as the penis (Pyroxenes disease) and is probably linked to conditions such as keloid formation, retroperitoneal fibrosis and the various forms of fibromatosis. Dupuytren's contracture never becomes malignant. It may however, be confused with

conditions such as implantation dermoid, foreign body reaction and even with trigger fingering. Patients with diabetes mellitus may present with Dupuytren's contracture which should be dealt with extreme caution since the response to surgery often ends with an even more severe contracture. In the younger patient, i.e. 40's, with a short history the condition is usually aggressive. One may be forced to remove not only the bands and nodules, but also part of the skin due to pitting. This skin could left open (McCash procedure) or could be grafted with a split skin graft. In the severe flexion contracture, especially of the small finger, it may not be possible to straighten out the finger. It may be advisable then to do an amputation of the small finger, using the dorsal skin as a flap to cover skin defects in the palm.



Dupuytren's Contracture

Flexion contracture of the PIP joint of the small finger is one of the most difficult deformities to treat. The typical nodules, bands and skin pits are evident.