

The long-term progression of Dupuytren's Contracture when treated solely by Percutaneous Needle Fasciotomy.

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For the first time, the long-term progression of Dupuytren's contracture in 2 patients with contractures in both hands when treated solely by needle fasciotomy has been followed over periods of 20 and 15 years respectively.

Monitoring patients over such a long period of time is difficult for multiple reasons. The condition is usually first observed from the age of 60 years and upwards, and the first surgical intervention sometimes follows years after the fingers have started to contract. Furthermore, patients may suffer other illnesses or move to another district and be forced to change their surgeon.

Patient A was 68 years old when in 1996 the fingers of his left hand were straightened by percutaneous needle fasciotomy (PNF) for the first time. During the next 20 years repeat fasciotomies, usually PNF, on one occasion PNF+ (extensive percutaneous needle fasciotomy with skin tear and full-thickness skin graft) were carried out every 3-5 years on the same fingers. Even after the sixth needle fasciotomy in 2016 it was possible to straighten the fingers completely (Fig. 1a).

In the meantime the little finger on the patient's right hand had contracted. Following PNF surgery in 2008 and PNF+ after a recurrence in 2010, no further recurrences have occurred (Fig. 1b).

Patient B has a case history of 15 years. Following a PNF on the 68 year old patient's left hand in 2002, a recurrence was treated by PNF+ 10 years later. Now, 5 years further on, no further recurrence has occurred (Fig. 2a).

It did, however, come to a contraction in the right hand which was corrected by means of PNF in 2016 (Fig. 2b).

Results:

The break in the continuity of the fibrous cords and full-thickness skin graft create a "firebreak". Only further investigations can show if the PNF+ is indeed more sustainable than the PNF.

Conclusions:

1. No one hand behaves like the other regarding when contractions occur, their morphology, frequency of recurrence and localisation. Dupuytren's contracture is a chameleon.
2. Even in one particular hand the joint involved in recurrences may vary over the course of time. Sometimes the PIP joint is affected, then the MCP joint, or even both joints.
3. A recurrence following a PNF+ can sometimes be successfully corrected by the simpler PNF technique.
4. PNF and PNF+ are straightforward to perform and may be repeated as often as necessary. In the case of patient A even after a fifth recurrence.

