# FAITS CLINIQUES — CASE REPORTS

# TRAUMATIC RELEASE OF DUPUYTREN'S CONTRACTURE

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A case of partial traumatic division of a Dupuytren's band in a 56-year-old man with known Dupuytren's disease is described. Management consisted of exploration of the wound and limited fasciectomy, with excision of the diseased fascia, the pretendinous band, the lateral cord and the spiral cord. Postoperative recovery was uneventful, and the patient returned to work. He remains well two years after the injury.

**Keywords**: Dupuytren; traumatic rupture. **Mots-clés**: Dupuytren; rupture traumatique.

#### CASE REPORT

A 56-year-old right handed Caucasian male crane driver on off-shore oil rigs presented to the Accident and Emergency Department. While at work, he had slipped and caught his right little finger on the edge of a crane, sustaining a hyperextension and crush injury with a laceration of the volar aspect of his right little finger.

The patient gave a 4-year history of bilateral Dupuytren's contracture, localized over the little fingers. He had been seen several times in the Orthopaedic Outpatient Clinic. On the latest examination, 26 days before the injury, there was a fixed flexion deformity of 40° at the metacarpophalangeal (MCP) joint and of 65° at the proximal interphalangeal (PIP) joint of the right little finger. The left little finger showed no extension of the MCP joint, and a fixed flexion deformity of 30° at the PIP Joint. Elective bilateral fasciectomies had been planned.

On examination, a white band protruding from a 1.5-cm laceration over the volar aspect of the proximal phalanx of the right little finger was noted. The diagnosis of severed flexor digitorum profundus tendon was proposed.

A thick Dupuytren's band protruded from the wound. The MCP joint contracture was 15°, and the PIP joint contracture was 45°. The tip of the little finger was anesthetic. The operation was carried out under regional nerve blocks. Through a Bruner zig-zag incision, a dense Dupuytren's band was found. This had been divided through 80% of its thickness, and it was followed proximally and distally. The digital neurovascular bundles were displaced and compressed by the band, but intact, having possibly been protected by the transected band itself. The flexor tendons were intact.

A fasciectomy was performed, and a splint in extension was applied. On the operating table, the right little finger could be placed in neutral extension at the MCP joint, and the fixed flexion deformity at the PIP joint was reduced to 20°. The patient started to mobilize the hand on the third postoperative day, retaining the splint at night. Postoperative recovery was uneventful. The patient resumed his previous occupation 6 weeks after the injury.

When last reviewed, 2 years after the injury, the right little finger showed no contracture of the MCP joint, and the PIP joint contracture was 20°. He was totally asymptomatic, and was working full time.

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#### DISCUSSION

Although traumatic release of a Dupuytren's contracture is probably more common than reported, an extensive literature search revealed only two previously published cases (2).

In the case presented here, a fasciectomy was performed emergently, as such a procedure had already been planned. Also, the injury had resulted in division only of the longitudinal fibers of the pretendinous band without affecting the lateral and the spiral cords, therefore leaving a residual contracture of the PIP joint which had to be corrected. Finally, as the patient planned to have surgery for the condition anyway, it was thought a suitable time to perform it. Waiting for spontaneous regression could have been long and unrewarding (3).

## REFERENCES

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#### SAMENVATTING

M. D'ARCANGELO, N. MAFFULLI, P. S. KOLHE. Traumatische ruptuur bij ziekte van Dupuytren.

De auteurs rapporteren één geval van partiële traumatische ruptuur van strengen in een hand, lijdend aan de ziekte van Dupuytren, bij een 56 jarige patiënt. De behandeling bestond in een exploratie van de wonde, in een beperkte fasciotomie, met excisie van de aangetaste fascia, van de pretendineuse weefsels, en van de laterale en spirale strengen. De postoperative recuperatie gebeurde vlot, met volledige werkhervatting. Twee jaar postoperatief was er geen recidief.

## RÉSUMÉ

M. D'ARCANGELO, N. MAFFULLI, P. S. KOLHE. Correction traumatique d'une maladie de Dupuytren.

Les auteurs rapportent un cas de rupture traumatique partielle d'une bride fibreuse au niveau du petit doigt chez un homme de 56 ans atteint d'une maladie de Dupuytren. Le traitement a consisté dans une exploration de la plaie et une fasciectomie limitée, emportant le fascia pathologique, la bride pré-tendineuse, la bride latérale et la bride spirale. Les suites opératoires ont été simples et le patient a repris le travail. L'évolution reste bonne à deux ans de l'accident.