

Extensive Percutaneous Aponeurotomy & Lipografting:
A Novel Treatment for Dupuytren's Disease

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Background: Surgical resection of Dupuytren contracture remains the standard for treatment but is fraught with morbidity and prolonged recovery. The purpose of this paper is to introduce a new minimally invasive treatment alternative for Dupuytren's Disease (DD) and to evaluate its safety and efficacy.

Methods: : a- Technique: Using steady extension force, a meticulous subdermal dissection of the cord is performed through multiple superficial nicks along the entire contracture band. This technique disintegrates the cord and separates it from the dermis. The resulting space is grafted with a loose lipoaspirate and the hand splinted in extension. One week postoperatively, patients were allowed to use the hand. Splinting continues for 6 months at night. b- Patients: Over the past three years we performed the procedure on 67 hands in 52 patients. We treated the complete spectrum of Dupuytren's disease including recurrences.

Results: Overall patients were very satisfied, having full recovery in 2-4 weeks. Maximum follow up was 3 years. All patients who were treated for recurrent disease (n=13) favoured the new technique over their previous open surgery. Four out of 52 patients were not satisfied, 1 had clear recurrence (severe diathesis) and 3 had dystrophies (of which 2 had dystrophies before in the other hand after open surgery). No tendon injuries were encountered and we had 1 nerve injury after treating a recurrence. At one year follow up MP joint recurrence was none, PIP joints were straight in 50%, and a mean reduction of 35 degrees in the other 50%. None of the PIP's was same or worse one year postoperatively.

Conclusion: We describe a new, safe and minimally invasive approach to the treatment of Dupuytren's contracture. This technique differs from standard percutaneous release in two major points: (1) full dermal separation and disintegration of the cord along its entire span, and (2) subdermal fat grafting to provide padding and to prevent scarring and recurrence. The most striking was the fast postoperative recovery and the softness of skin in the operated area. Fat grafting percutaneous fasciotomy seems to change the biology of the disease, to restore the missing subdermal fat and to rejuvenate the hand.