

Dupuytren's Disease: About 10 Cases and Review of Literature

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Abstract: Dupuytren's contracture is a retraction of the palmar fascia and its digital expansions. The evolution remains unpredictable causing a gradual and irreducible flexion of the fingers. To relieve deformity and restore function surgical techniques are used, cure is not anticipated and recurrence is common. Multiple surgical techniques have been described and the precise surgical strategy needs to be tailored to the individual patient. For good results post-operative rehabilitation and patient engagement is required. Our work is a retrospective study over the period of one year (2013) on 10 patients with Dupuytren's contracture and treated in our service.

Keywords: Dupuytren's contracture, Flexion contracture, Fasciectomy

INTRODUCTION

Dupuytren's disease is a common fibro-proliferative disorder causing flexion contractures in the hand that generally affects individuals between the fifth and the seventh decade. There has been significant progress made in the understanding of the aetiopathogenesis of Dupuytren's disease and less invasive treatments are being developed to minimize the surgical morbidity.

CASE REPORTS

Our work is a retrospective study over the period of one year (2013) on 10 patients with Dupuytren's contracture and treated in our service. All patients were men, with a clear phenotype, their average age was 40 years, right-handed, the extension deficit of the 4th and 5th finger of the hand (Fig. 1) was the main reason for consultation. Among the predisposing factors, there is manual labor and consumption of alcohol in 7 patients and diabetes in 3 patients. But none of them had similar cases in the family.



Fig. 1: Extension deficit of the 4th and 5th finger of the hand

RESULTS

The onset of symptoms dated back averaging three years by the occurrence of palmar nodules (Fig. 2), no history of trauma, or inflammation. Clinical examination of the affected hand noted the presence of flanges and nodules sitting mainly at the palmar surface of F4 and F5. Extension of the affected fingers was reduced in stage II according to the classification of Tubiana.

Hand affected radiographs had not objectified bone involvement (Fig. 3). All patients were treated with selective fasciectomy tissues (Fig. 4) and the postoperative course was satisfactory. Precocious functional rehabilitation was started on the 5th day and all patients regained a functional hand (Fig. 5). We had not observed no recurrence or complications (algodystrophy).



Fig. 2: Existence of palmar nodules



Fig. 3: Radiographs without bone involvement



Fig. 4: A selective fasciectomy tissues



Fig- 5: A good functional recovery of the hand.

DISCUSSION

Dupuytren's disease remains the prerogative of men forties. Of unknown etiology, many factors have been implicated: the genetic factor (clear phenotype) [1], diabetes, vascular lesions. This disease is characterized by the achievement of the palmar aponeurosis, of its longitudinal and transverse fibers. The evolution is unpredictable and is by thrust.

The prognostic factors may be:

- General : family history, young age, achieving women, associations with other pathologies.

- Regional : the bilateral nature, the association of extrapalmaires lesions (Ledderhose or Peyronie disease).
- Local : the achievement of the ulnar side of the hand, achieving ermique, scalability of the disease and its classification.

The Classification of Tubiana [2] allows an objective assessment of indications and results:

- *Stage 0: no lesion
- *Stage N: nodule without retraction
- *Stage I: total retractions MP + PIP + IPD between 0 and 45 °
- *Stage II: total retractions MP + PIP + IPD between 46 and 90 °
- *Stage III: total retractions MP + PIP + IPD between 91 and 135 °
- *Stage IV: total retractions MP + PIP + IPD > 135 °

Medical treatment has not given evidence. Soon as there is an active extension deficit of fingers, surgical treatment is required and in most cases this is an indication of a selective fasciectomy diseased tissue while respecting the neurovascular pedicles [3]. Early rehabilitation is complementary to surgery and a prolonged search of complications or recurrence monitoring [4].

CONCLUSION

Multiple surgical techniques are described and the precise surgical strategy needs to be tailored to the individual patient. Post-operative rehabilitation and patient engagement is required for good results.

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