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Case Series

Dupuytren's Disease: About 4 Clinical Cases

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Abstract: Dupuytren's disease is a chronic fibroproliferative disorder of the palmar fascia leading to progressive flexion contractures of the fingers, most often affecting the ring and little fingers. This condition predominantly affects men over the age of 50 and has a multifactorial etiology involving genetic predisposition and environmental risk factors such as manual labor and alcohol consumption [1, 2]. We report four clinical cases treated at the CHU de Rabat to illustrate the spectrum of presentations and therapeutic outcomes. All patients underwent surgical management with open fasciectomy. The procedures resulted in functional improvement without significant complications. A structured postoperative rehabilitation program was followed, contributing to satisfactory recovery. Non-surgical treatments such as collagenase injections may be effective in selected early-stage cases but were not applied in our series [3, 4]. The choice of therapy must be tailored according to disease severity and patient function. Surgical excision remains the standard in advanced stages, especially when deformities impair daily activities [2-5]. Follow-up is essential to monitor recurrence, which remains a challenge despite optimal management. This series emphasizes the importance of early diagnosis, patient education, and coordinated multidisciplinary care in optimizing outcomes.

Keywords: Dupuytren's Disease, Fasciectomy, Palmar Fibromatosis, Flexion Contracture, Hand Surgery.

INTRODUCTION

Dupuytren's disease, also known as palmar fibromatosis, is a benign but potentially disabling fibroproliferative condition of the palmar aponeurosis. It causes progressive digital flexion deformities, particularly affecting the fourth and fifth digits [1]. The disease mainly affects men over 50 years of age and shows a high prevalence in Caucasian populations [2]. Several risk factors have been implicated, including diabetes, alcoholism, epilepsy, and manual labor [3]. The pathogenesis involves abnormal myofibroblast proliferation and extracellular matrix deposition [1].

This article presents four cases treated surgically at the Department of Orthopedic Surgery and Traumatology at CHU de Rabat.

MATERIALS AND METHODS

We conducted a retrospective analysis of 4 patients treated for Dupuytren's disease between 2020 and 2024. The study included demographic data, clinical presentation, surgical technique, and postoperative outcomes. All patients were treated by open fasciectomy under loco-regional anesthesia and followed for a period ranging from 6 months to 2 years. Rehabilitation was initiated postoperatively to maintain range of motion.

CLINICAL CASES

Case 1: A 63-year-old right-handed male presented with a 3-year history of progressive contracture of the right ring finger. Examination revealed a palpable fibrous cord along the 4th ray and a 40° flexion deformity at the metacarpophalangeal joint. Open fasciectomy was performed, and complete release was achieved (Figure 1) [4].

Case 2: A 72-year-old patient presented with bilateral disease affecting both ring and little fingers. Surgery was performed on the more severe side (right hand), with complete intraoperative extension achieved. No complications were observed at follow-up [5].

Case 3: A 55-year-old laborer consulted for left-hand contracture involving the 4th and 5th fingers. Both MCP and PIP joints were involved. Fasciectomy with Z-plasty

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was performed, followed by rehabilitation. Recovery was satisfactory.

Case 4: A 60-year-old diabetic presented with early-stage disease and painful nodules on the palm. Surgery was performed to release the contracted cord of the right little finger. At 6-month follow-up, no recurrence was observed.

Figure 1 and 2: Showing Dupuytren's disease affecting the 4th and 5th toes

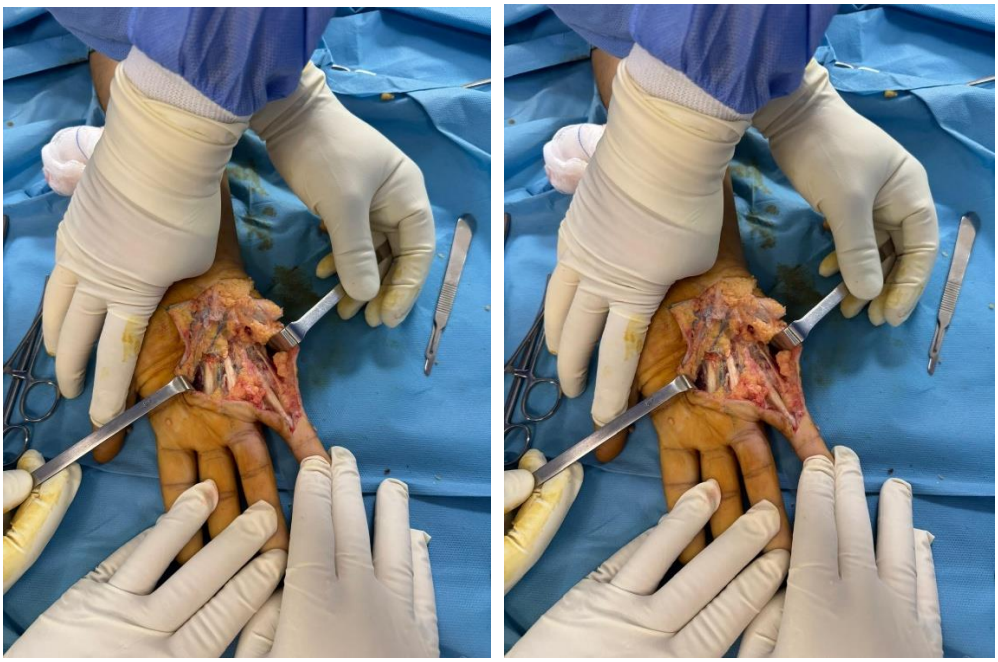

Figure 3 and 4: Showing perooeratory image during treatment of Dupuytren's disease

DISCUSSION

Dupuytren's disease has an unpredictable course. Surgical treatment is indicated when contractures exceed 30° or interfere with hand function [2]. Fasciectomy remains the most effective treatment in advanced stages, though recurrence rates can reach 20–60% [1-5]. Less invasive options like collagenase injections and needle aponeurotomy are alternatives in early stages [3, 4].

In our series, all patients underwent open fasciectomy with good postoperative outcomes. No neurovascular injury or recurrence was noted during the follow-up period. Early rehabilitation significantly improved joint mobility and patient satisfaction.

The literature emphasizes the importance of individualized treatment plans based on severity, age, and patient occupation [1-4]. Education on the risk of recurrence is essential for long-term management.

CONCLUSION

Though benign, Dupuytren's disease can lead to major functional impairment. Surgical management with open fasciectomy remains the gold standard in advanced stages. Early intervention and patient-centered care improve outcomes and reduce recurrence. The experience at CHU de Rabat confirms the efficacy of open surgery in selected cases, provided that postoperative rehabilitation is rigorously applied.

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