

Bilateral Dupuytren's Contracture in Chronic Liver Disease

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ABSTRACT

Introduction: Dupuytren's disease is a proliferative disorder of the palmar fascia. There is proliferation of myofibroblasts and formation of nodules and fascicles within the palmar fascia. Dupuytren's contracture has greater incidence in alcoholics. The etiology and pathophysiology of this condition is not known clearly.

Case report: We report a case of 48 year old male chronic alcoholic presented with distension of abdomen, yellow discoloration of sclera since 5 months and progressive limitation of little finger and ring finger for 3 months. The patient was fully investigated and found to have cirrhosis of liver with decompensated cirrhosis with signs of portal hypertension with bilateral dupuytren's contracture.

Conclusion: Dupuytren's disease is a disease of unknown etiology. It has association with various conditions. Dupuytren's contracture has increased incidence in chronic liver disease and chronic alcoholism. It is a rare sign and poorly reported.

Keyword: Cirrhosis, Alcohol

INTRODUCTION

Dupuytren's disease is a proliferative disorder of the palmar fascia consisting in the creation of myofibroblasts from fibroblasts, their excessive proliferation, the formation of nodules and fascicles within the palmar fascia, as well as the future development of digital contractures, most often of the fourth and little fingers.¹ Dupuytren's contracture is also known as morbus Dupuytren and Viking disease. It is named after Baron Guillaume Dupuytren, the surgeon who described an operation for correction of contracture in the Lancet in 1831.² The ring finger and little finger are the fingers most commonly affected. The middle finger may be affected in advanced cases. The main risk factors associated with this disease are alcohol consumption, smoking, diabetes mellitus, history of manual labour, frozen shoulder, epilepsy and hand injury.³

CASE REPORT

A 48-year-old male chronic alcoholic presented with distention of abdomen, yellow discoloration of sclera since 5 month and progressive limitation of movement of his little finger and ring finger for 3 months.

On examination, he had icterus, pallor, distended and tortuous abdominal veins i.e caput medusae, ascites, splenomegaly and the physical examination of hand revealed a well-palpable band on the proximal and middle phalanx of the little finger and ring finger with bilateral contractures on ulnar side of both hands suggestive of Dupuytren's contracture. Ultrasonography of abdomen was suggestive of

cirrhosis of liver with ascites with portal vein diameter of 16 mm and upper GI endoscopy showed oesophageal varices (grade II) with portal gastro-duodenopathy.

DISCUSSION

Dupuytren's contracture is a slowly progressive fibrosis of palmar fascia. It is a proliferative disorder of palmar fascia. Dupuytren's disease can be distinguished from other causes of hand contracture because it begins as a nodule and slowly progresses to contracture of the fingers with the presence of contractures, bands, skin pitting and dimpling.⁴

Our patient presented with classical features of bilateral Dupuytren's contracture with flexion contracture (figure 1,2). Disease progression is classified using a grading system. Grade 1 disease presents as a thickened nodule and a band in the palmar aponeurosis; this band may progress to skin tethering, puckering, or pitting. Grade 2 presents as a peritendinous band, and extension of the affected finger is limited. Grade 3 presents as flexion contracture.⁵

The exact etiology of this disease is not known. The incidence increases with patient clinical conditions such as diabetes, smoking, chronic alcoholism, seizures and infection.³ Greater alcohol intake per week is associated with increased risk of Dupuytren's contracture. There is a strong association between diabetes and Dupuytren's disease. Studies have found a 3 to 33 percent prevalence of Dupuytren's in patients with diabetes.⁶

Evidence suggests an autosomal dominant pattern of inheritance with incomplete penetrance.⁷ Dupuytren's disease is more common in men and usually presents after 40 years of age. Smoking also increases the risk of the disease.⁸ A connection between epilepsy and Dupuytren's disease has been reported.⁹

Although, many cases appear to be idiopathic and without coexisting conditions, a variety of associated condition has been reported. Family history, manual labour with vibration

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Figure-1: Bilateral Dupuytren's contracture



Figure-2: Caput Medusae

exposure, prior hand trauma, alcoholism, smoking, diabetes mellitus, hyperlipidemia, Peyronie disease are associated with Dupuytren's contracture.¹⁰ Treatment of Dupuytren's contracture is mainly surgical and it is unsatisfactory.

CONCLUSION

Dupuytren's contracture is a disease of unknown etiology. It has associations with various diseases. It has increased incidence in alcoholic and non-alcoholic cirrhosis. Bilateral Dupuytren's contracture in cirrhosis of liver is a rare finding. We need further study into this condition to elucidate its various associations, etiology and pathogenesis.

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