



Dupuytren Contracture

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Abstract

Dupuytren's disease is a common and disabling fibroproliferative condition of the hand. The condition is named after Baron Dupuytren, a French surgeon, who developed eminent surgeon Henry Cline's initial observations regarding this entity. It belongs to the group of fibromatoses that include plantar fibromatosis, penile fibromatosis, and fibromatosis of the dorsal Proximal interphalangeal joints. Although many cases appear to be idiopathic, various associated diseases and risk factors have been reported – chronic alcoholism being one of them.

Keywords: Dupuytren contracture; Dupuytren contracture in chronic alcoholics.

Case Presentation

A middle aged male presented to us in the medicine outdoor of Govt. Medical College and Guru Nanak Dev Hospital, Amritsar, with complaint of fear of “cancer in his hands”. The patient was a chronic alcoholic since last 30-35 years, drinking around 500ml of alcohol/ day. The patient had moderate obesity, grade 2 hypertension and bilateral Dupuytren's contracture. He was otherwise normal in general and systemic examination and taking treatment for obesity and hypertension. Laboratory investigations including haematological, renal, hepatic, lipid profile were normal. ECG and 2D

Echocardiography were unremarkable. X rays both hands did not reveal any abnormality. Patient refused injection collagenase and did not consent for surgery also.

Discussion

Dupuytren disease is a fibrosing disorder that results in slowly progressive thickening and shortening of the palmar fascia and leads to debilitating digital contractures in hand. The condition most commonly affects the ring and little fingers, although any digit can be involved

with particularly affecting the metacarpophalangeal (MCP) joints or the proximal interphalangeal (PIP) joints. The ring finger is most commonly involved, followed by the fifth digit and then the middle finger. The index finger and the thumb are typically spared. Pitting and thickening of the palmar skin are the earliest manifestations of Dupuytren's disease. However, the key to early diagnosis is recognition of the nodule, a firm painless mass fixed to skin and deeper fascia. Classically, a nodule precedes development of a cord. Over time, which may be months or several years, the cord gradually contracts, reeling in the metacarpophalangeal joint and the proximal interphalangeal joint and leading to progressive digital flexion deformity (fig. 1,2,3). Contracture is a common presenting complaint, although fear of malignancy or embarrassment of a handshake may precipitate the initial consultation. The major complication of Dupuytren contracture is impaired function. Contractures can affect activities at the workplace (manual labour, wearing gloves) and home

(washing, dressing), posing a threat to independence.

Although the cause of Dupuytren disease is unknown, a family history is often present. Males are three times as likely to develop disease and are more likely to have higher disease severity. Male predominance may be related to expression of androgen receptors in Dupuytren fascia. Other potential risk factors include manual labour with vibration exposure, alcoholism, smoking, diabetes mellitus, anticonvulsants, epilepsy, hypercholesterolaemia and hand trauma.

Therapies include conservative medical and surgical modalities. Injection with collagenase has shown early clinical promise for mild disease limited to the metacarpophalangeal joint. Surgery readily corrects contracture, but recurrences are commonly seen.

Although the condition is not fatal, significant morbidity can occur if patients are untreated.



Fig. 1 Showing bilateral Dupuytren's contracture



Fig. 2 Showing bilateral flexion deformity of Ring fingers



Fig. 3 Showing nodule, cord and flexion deformity

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References

1. Bansal V, Naidu SH. Dupuytren's disease. *Curr Opin Orthop.* 2005. 16(4):236-9.
2. Trojian TH, Chu SM. Dupuytren's disease: diagnosis and treatment. *Am Fam Physician.* 2007. 76(1):86-9.
3. Al-Qattan MM. Factors in the pathogenesis of Dupuytren's contracture. *J Hand Surg Am.* 2006. 31(9):1527-34.
4. Geoghegan JM, Forbes J, Clark DI, Smith C, Hubbard R. Dupuytren's Disease Risk Factors. *J Hand Surg.* 2004/10. 29B:423-426.
5. Hurst LC, Badalamente MA, Hentz VR. Injectable collagenase clostridium histolyticum for Dupuytren's contracture. *N Engl J Med.* 2009. 361(10):968-79.

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