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Original Research Paper

General Medicine

A CASE OF DUPYTERN'S CONTRACTURE

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KEYWORDS :

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. Dupuytren's contracture incidence varies geographically and racially with the highest incidence in northern Europe and the Caucasian population, as compared to Asians and Africans .Dupuytren's disease is typically observed in the adult population.

CASE REPORT :

38 year old male known alcoholic,diabetic not on regular medication came with complaints of pain while lifting right shoulder for past 2 months.no other comorbidities. Based on data obtained from the patient the thickening of the third and fourth finger was observed since 8 months. No relevant family history.physical examination revealed well-palpable band of cohesive tissue on the proximal and middle phalanx of the middle and ring finger (left hand) appeared 8 months ago and evolved.Systemic examination is unremarkable.

investigations were mentioned in table.Based on clinical and laboratory data patient is diagnosed as periarthritis right shoulder and dupytern's contracture of left hand.patient was managed with insulin,physiotherapy and percutaneous needle fasciotomy and lipofilling on the left hand followed by cast immobilisation was done in view of dupytern's contracture of left hand,following which patient showed good recovery.

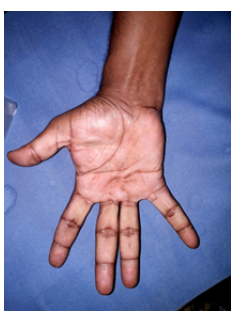

Figure: shows contracture of middle and ring finger of left hand

Table : Investigation table

Lab parameter	value	Reference range
FBS	206mg/dl	< 110 mg/dl
PPBS	427mg/dl	< 140 mg/dl
HBAIC	9.4%	< 5.5%
GGT	62 IU/L	<55 IU/L
SGOT	41 IU/L	< 35 IU/L
SGPT	52 IU/L	< 45 IU/L
Total Bilrubin	1.4 mg/dl	0.3-1.1 mg/dl
s.creatinine	0.9	0.9-1.3 mg/dl
s.uric acid	5.5	4.4-7.6 mg/dl

DISCUSSION :

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. Dupuytren's myofibroblasts produce a particular type III collagen, characteristic of the disease. Factors favoring the development of the disease include alcohol abuse, smoking, anti-epileptic drugs, diabetes mellitus, and liver cirrhosis, although not all have been confirmed (1). Dupuytren's contracture incidence varies geographically and racially with the highest incidence in northern Europe and the Caucasian population, as compared to Asians and Africans (1, 2). A family history has also been observed, which might be evidence of its genetic basis.

Dupuytren's disease is typically observed in the adult population, while in children and adolescents it is rarely diagnosed. Only several cases were reported in children under the age of 10 years, including two infants under one year (3-8).

The prevalence of Dupuytren's disease is believed to be low in non – Caucasian and diathesis is even rarer. The patient presented in our OPD with involvement of Dupuytrren's disease showed two risk factors[uncontrolled diabetis and ethanolic] out of six, based on Hindocha revision for Dupuytren's diathesis (9).The presence of a thumb pretendinous band is another sign of an aggressive disease. According to Tubiana, there are three types of radial involvement. The so called "malignant form" occurs in young people and the radial disease is almost always accompanied by ulnar contractures. Patients with this type of radial involvement have most of the criteria for Hueston's "Dupuytren's diathesis" (10).

Rayan described two types of Dupuytren's disease- typical and atypical. The typical type is confined to Caucasians from Northern European origin and displays bilateral involvement and ectopic lesions .It is believed to be transmitted as an autosomal dominant pattern of inheritance. The atypical form is related to patients without family history, there is ethnic diversity and the disease is unilateral without ectopic manifestation (11).It seems that apart from family predisposition and racial predilection, there are other factors which play a major role in the etiology of Dupuytren's disease. There may be a genetic basis of within the Asian population and that expression could be related to the operation of risk factors upon those predisposed individuals (12).

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