CASE REPORT

A CASE OF OSTEOCHONDROMA OF DISTAL RADIUS MIMICKING DISTAL RADIO: ULNAR SYNOSTOSIS: RARE PRESENTATION-WITH REVIEW OF LITERATURE

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ABSTRACT: Inferior radio-ulnar synostosis is very rare and till date very few true cases of radio- ulnar synostosis were reported. We report a case of Osteochondroma of distal radius which mimicked this condition.

KEYWORDS: Osteochondroma, Distal Radius, Inferior radio-ulnar synostosis.

INTRODUCTION: True Inferior Radio-Ulnar synostosis is a rather rare entity when compared to superior radio-ulnar synostosis.¹ Very few true inferior radio-ulnar synostosis have been reported. We present a case of Osteochondroma of Distal Radius, which initially mimicked distal radio-ulnar synostosis.²

CASE REPORT: A 24 years old female, teacher by occupation, presented with complaints of inability to write on the black board since 18 months, which increased in severity since 2 months. There is no history of trauma, no history of local wound or infection.

On examination, pronation and supination of fore-arm was restricted with only a jog of movements. Flexion and extension were normal. Examination of Radial nerve, Median nerve and Ulnar nerve showed normal function.

Initial conventional x-ray of fore-arm with elbow and wrist joint showed osseous band at distal radio-ulnar joint (Fig. 1). With these radiological and clinical features we had distal radio-ulnar joint synostosis in mind and we referred the literature only to find a case report of true distal radio-ulnar synostosis which was reported in 1947, for which excision of distal end of ulna (Darrach's procedure) was done with good results and another case reported in June 24,³ where they described 1 case of true Distal Radio-ulnar synostosis with post-traumatic aetiology .

So we thought CT- scan may throw additional light in arriving at management plan. CT scan showed narrow gap in the osseous band which could not be appreciated in conventional x-ray and looking at it, we had provisional diagnosis of osteochondroma arising from distal end of radius with cupping of distal ulna. Since it had all the benign features radiologically, we planned excision biopsy. We operated upon through volar approach and we could excise the mass with ease which had all the features of osteochondroma. On table after excision of the mass, complete range of pronation and supination was achieved.

Histopathological report confirmed the diagnosis of "osteochondroma".

DISCUSSION: Congenital superior Radio-ulanr synostosis was first described by Sandifort in 1793, which is a rare congenital malformation causing limited rotational movements of fore-arm, leading to difficulties with activities of daily living. It is most common congenital functional disorder of the elbow joint.³

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Distal Radio-ulnar synostosis is very rare and whenever it occurs, it could be due to trauma or infection only and never congenital, unlike superior radio-ulnar synostosis which is always congenital. Whenever osseous band at distal radio-ulnar joint is come across, digital x-rays and CT- scan is mandatory to put aside the confusion of synostosis.

Simple excision of the mass (Invariably osteochondroma) is sufficient to regain complete range of movements.

Figure 1.

Figure 2. Pre-operative.

Post-operative

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