## Clinical Images

## **Unilateral cleft hand (lobster-claw deformity)**



Fig. 1. Left hand (dorsal view) shows a median cleft and flexion deformity at proximal inter-phalangeal joints in the index and ring finger. Fig. 2. Radiograph of left hand shows a transversely oriented bone between third and fourth metacarpal, third metacarpal was present but phalanges of middle finger were absent except for rudimentary proximal phalanx, carpals were normal. Fig. 3a. Postoperative photograph of left hand (dorsal view) showing a decreased cleft. b. Postoperative radiograph of left hand with an excised transverse bone and third metacarpal (partial).

A five year old female child presented to the Department of Orthopaedics, BPS Government Medical College, Sonepat, Haryana, India in June 2012, with deformity of left hand since birth. The left hand had a large median cleft with an absent middle finger and flexion deformity of the index and ring

finger (Fig. 1). The right hand and bilateral feet were also normal. Radiograph of hand showed transversely oriented bone between third and fourth metacarpal, third metacarpal was present but phalanges of middle finger were absent except for rudimentary proximal phalanx (Fig. 2). Other than this, no other congenital

anomalies were present. The child was born out of a non-consanguineous marriage with a normal perinatal and family history. Surgery involved complete excision of transverse bone with partial excision of the third metacarpal plus apposition of the second and fourth metacarpal by absorbable sutures leading to a decreased cleft (Fig. 3a and 3b). Flexion contracture of index and ring finger was helpful in pinch and grasp and would be corrected later, if required.

Cleft hand, lobster claw hand and ectrodactyly are different names given to central deficiencies of the hand due to longitudinal failure of formation of 2<sup>nd</sup>, 3<sup>rd</sup> or 4<sup>th</sup> ray. It has an incidence of 1 to 4 in 100000 live births<sup>1</sup>. Associated anomalies include tibial aplasia, mental retardation, ectodermal defects, orofacial clefting and

deafness<sup>2</sup>. Treatment is surgical correction for function and/or cosmoses.

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