

## Polysyndactyly-Cleft Foot Complex:a Rare Case



### Medical Science

KEYWORDS :

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#### Introduction:

Polydactyly is a common anomaly as an isolated or a part of congenital syndrome which has autosomal dominant inheritance [1]. It is classified as preaxial, central and post axial depending on location of duplication. Central polydactyly is very rare and usually associated with syndactyly [2]. It is usually bilateral and more common in girls than boys.

#### Case presentation:

Six-month-old boy presented with left side polydactyly with broad hallux and forefoot. Growth and development of the child was normal (Fig 1). On examination, cleft with bony projection between broad hallux and second toe were found. Systemic examination was normal. Foot radiograph showed central metatarsal type 2<sup>nd</sup> and 3<sup>rd</sup> polydactyly with extra single phalange in the cleft (Fig 2 & 3). All other radiographs including right foot were normal. Patient was treated with central ray amputation and repair of transverse intermetatarsal ligament.

#### Discussion:

Central synpolydactyly is a genetic condition of the HOXD13 gene on chromosome 2 with autosomal dominant inheritance. Delayed appearance of the distal phalanx was described with central type of polydactyly. The best outcomes are from complete ray resection. Reconstructive surgery is complicated if there is osseous synostoses and deformity. Surgical outcome is better than natural history.

#### Conclusion:

Our case is unique in form of unilateral central Polysyndactyly-cleftfoot complex. It is a rare combination which is unclassified.

## REFERENCE

1. Galois L, Mainard D, Delagoutte JP (2002). Polydactyly of the foot. Literature review and case presentations. Acta Orthop Belg. 68:376-380. | 2. Watanabe H, Fujita S, Oka I (1992). Polydactyly of the foot: an analysis of 265 cases and a morphological classification. Plast Reconstr Surg. 89:856-

77.