

## **ECTRODACTYLY WITH COMPLEX SYNDACTYLY OF THUMB AND INDEX FINGER: A GRIP OF HOPE**

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**Introduction:** Ectrodactyly or cleft hand is the congenital absence of central rays of limbs. The incidence varies depending on classification, either unilateral or bilateral, isolated or syndromic. Variation for cleft hand is wide. In our case, Manske and Halikis classification is use, as it based on condition of first web space which an important aspect in functional perspective.

**Discussion:** 14 month old boy referred to us with right cleft hand, associated with complex syndactyly of thumb and index finger. X-ray shows bifid third metacarpal bone where the radial side joined with 2nd metacarpal to form MCPJ of index finger. Based on Manske and Halikis classification, our patient belongs to the class III variation. Op was done at the age of 1 year and 9 month old, using Snow-Littler procedure. Palmar based skin flap created, which later transposed to first web space after syndactyly release. FTSG taken from left groin to cover remaining bare area at right thumb. For bony procedure, remaining bifid third metacarpal at ulnar side excised. Second metacarpal and right side of third metacarpal osteotomized and shifted to base of third metacarpal. 0.8mm transfix K-wire inserted at second and third metacarpal. As index finger has been shifted ulnarly, a wider space created for first webspace. Postoperatively, above elbow cast was applied with elbow at 30 degree extension. K-wire then removed after 3 months. At 7 month post op, the child had shown a good progress in hand grip and thumb function.

**Conclusion:** Children with congenital hand differences may experience emotional stress related to functional limitation and aesthetic deformity when they grow older. Some deformity requires intervention at an early age to give better functioning and aesthetically pleasing outcome. In regards to our patient, the main objectives are to give better thumb and hand function, and better physical appearance.