

Interesting Cases

Blessed Hands

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A B S T R A C T

Hand anomalies can aid the diagnosis of underlying pathology. Trident hand is characterised by short stubby fingers and an increased gap between the first and second, and third and fourth fingers resembling a Trishula. The phenotypic anomaly is associated with certain skeletal dysplasias like achondroplasia and recognition of the same can aid diagnosis.

Keywords: Achondroplasia, Dysplasia, Skeletal, Trident

A two-month-old male infant was brought to the outpatient department for routine evaluation as well as immunisation. The baby appeared dysmorphic and on enquiring, the mother believed that the child was blessed for his hands resembled the "trishula" (Figure 1). Examination revealed short limbs, a relatively large head with a flattened nasal bridge and mid-face hypoplasia. The anthropometric measurement revealed a head circumference of 40 cm, chest circumference of 34 cm, and length of 48 cm. The lengths of the upper and lower segment were 32.5 cm and 15.5 cm, with the ratio between the two being 2.09:1. Radiographs of long bones showed rhizomelic shortening (shortened humerus and femur bilaterally) and metaphyseal flaring. Hands had short metacarpals with comparable size while middle and ring fingers (trident hand) were separate. Based on typical phenotypic and radiological features, a diagnosis of achondroplasia was made.

The classical appearance of hands in this infant is called "trident hands". The hands appear short, stubby, and the fingers are nearly of equal length, deflected at the first interphalangeal joint leading to separation of the first and second, as well as the third and fourth digits. The hands, therefore, resemble a "three-pronged spear" which has been significantly described in the Hindu, Roman and Greek

mythology. Trident resembles the "trishula", a weapon borne by Hindu deities Shiva, Kali, and Durga. Trident is also a weapon of Poseidon, the Greek God of the Sea, and Neptune, the classical Roman equivalent. Trident hand configuration is the characteristic of certain skeletal dysplasias namely, achondroplasia¹ and thanatophoric dysplasia.² This sign may be observed clinically as well as radiologically. The sign may also be recognised on foetal ultrasound and can aid antenatal diagnosis of the condition.³



Figure 1.Trident Hand



Consent: The child's parents have given their consent for using his image for publication.

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