HUMERORADIAL SYNOSTOSIS WITH ULNAR APLASIA AND MONODACTYLY
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Section: Musculoskeletal system
Case Type: Clinical Cases
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Patient: 21 years, male

Clinical History:
Radiographic findings of a patient with right upper extremity abnormalities was presented.

Imaging Findings:
The patient had right-sided phocomelia with monodactyl. He has no remarkable prenatal history and physical examination was within normal limits, with the exception of the right upper extremity. Radiographs showed that humerus synostosed with deformed radius, ulna was absent and there was only one carpal bone, one metacarpal bone and one biphalangeal digit. There was an abnormal distal medial bony projection from the humerus, which was probably an elongated medial epycondyle. Morphologic and radiographic features of the finger are similar to first finger.

Discussion:
Several classifications about congenital anomalies of the upper limb have been described. Humeroradial bifurcation due to fusion of humerus and radius and oligodactyly is very rare congenital abnormalities and frequently associated with aplasia or hypoplasia of the ulna. It has been described as Type III ulnar aplasia by Swanson et al. They have been classified into four type of ulnar ray deficiencies based on the fingers: type I, hypoplasia or partial defect of the ulna; type II, total defect of the ulna; type III, total or partial defect of the ulna with humeroradial synostosis; type IV, ulnar defect with congenital amputation at the wrist. In the presented case, the upper limb defect was not associated with any other anomaly. It is similar to phocomelia type 3 (forearm deficient) but in phocomelia, hand structure is present. But it may occur as part of SC phocomelia syndrome. Humeroradial synostosis is most often unilateral, but some bilateral cases also have been reported. It can be alone or associated with other congenital anomalies. There are some reports about concomitant factors such as maternal smoking, exposure to alcohol, drug abuse and other drugs, poor maternal nutrition and fetal hypoxia.

Differential Diagnosis List: HUMERORADIAL SYNOSTOSIS WITH ULNAR APLASIA

Final Diagnosis: HUMERORADIAL SYNOSTOSIS WITH ULNAR APLASIA

References:

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