

A Rare Incidental Finding Of Unilateral Complete Intercarpal And Carpometacarpal Coalition With Good Functional Outcome

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INTRODUCTION:

Carpal coalition is an uncommon entity that are characterized by the anomalous union of two or more carpal bones. We present a rare case of unilateral complete intercarpal and carpometacarpal coalition with good functional outcome. To our knowledge, this incidental finding case never been reported in the literatures.

PRESENTATION OF CASE & RESULTS:

A 26-year-old army officer of Malay origin complaining of occasional left-hand vague discomfort for the past 18 months with no history of significant trauma, infection or inflammatory arthropathy. Clinical examination of the hand and wrist was unremarkable. There is no deformity or intrinsic muscle wasting of the left hand noted. The range of motion over wrist joint, MCPJ, PIPJ and DIPJ was symmetrical and comparable to the right hand. The plain radiograph of both hands was done for comparison. It shows normal plain radiography of the right hand which includes normal row of carpal bones. However, the plain radiography of the left hand shows complete intercarpal and carpometacarpal coalition except for the first carpometacarpal joint. The left wrist joint is preserved. There is no other abnormality noted in clinical or radiological skeletal survey of this patient. The blood parameters for infection and rheumatological markers are also within normal limits.



Figure 1 (A-C): Plain radiography of the left hand shows complete intercarpal and carpometacarpal coalition except for the first carpometacarpal joint.

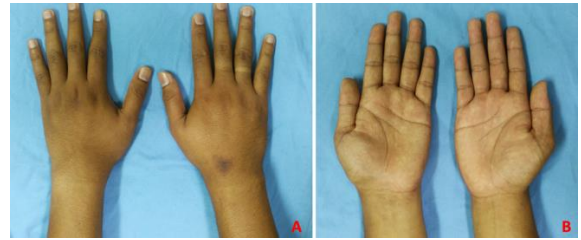


Figure 2 (A&B): Normal appearance of both hand

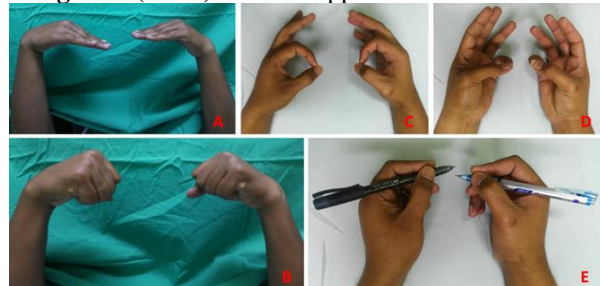


Figure 3 (A-E): Good functional outcome of left hand

DISCUSSIONS:

Carpal coalition commonly represents a congenital anomaly that may occur alone or association with syndromic or metabolic disorders. Acquired carpal coalition anomaly rarely occur secondary to multiple inflammatory arthropathies, metaplastic conversion of mesodermal derivatives, trauma-associated fusion and surgical arthrodesis performed. The most common site of carpal coalition reported in literatures occurs between the lunate and triquetrum followed by coalition between the capitate and hamate. Most of the cases are usually asymptomatic but symptoms may appear secondary to biomechanical stress at the site of fusion.

CONCLUSION:

Complete unilateral all intercarpal and carpometacarpal coalition never been reported in the literature most probably because of asymptomatic with good functional outcome.

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