Rare Os Radiale Externum fracture: A case report.

¹Pong, YH; ²Mohd Bakrynizam Abu Bakar Siddik; ³ Siti Hajera Sa'aid ¹Department of Orthopaedics, Hospital Sultanah Maliha, Langkawi

INTRODUCTION:

Accessory ossicles of the wrist are generally asymptomatic and often incidental findings in radiographs. ^[1,2] The frequency of sesamoid ossicles in human hand is around 0.4 to 1.6 per cent and this can vary in different populations and ethnic groups. ^[1,2] In cases of impingement or direct trauma, these ossicles can cause pain. ^[2] Os radiale externum is an accessory ossicle which presents at distal lateral margin of the scaphoid tubercle, adjacent to the trapezium. ^[1]

REPORT:

A 34-year-old male patient presented with left wrist pain and swelling after alleged trauma over base of left thumb. Examination revealed tenderness over radial aspect left wrist. Suspicion of left scaphoid bone was raised after reviewing the plain radiographs. Computed tomography (CT) left wrist however revealed fracture of an accessory ossicle located in between and lateral to left trapezium and left scaphoid bone.



Figure 1: Plain radiograph left wrist



Figure 2: CT left wrist

He was subsequently treated conservatively with thumb spica immobilization. On 3 weeks follow up, patient experienced great improvement in wrist pain and movement.

Studies on primates revealed presence of such sesamoid bone on abductor pollicis longus a primitive characteristic, usually absent in human.^[3]

Presence of accessory ossicles in hand are likely due to phylogeny, commonly found on ligaments or tendons under constant mechanical stress and pathologically associated with trauma, osteoarthritis, inflammation and pain syndromes.^[1]

CONCLUSION:

Fracture of hand ossicles are rare and availability of CT scan can allow accurate diagnosis and management.

REFERENCES:

1. Gujar, V., Bokariya, P., Hiware, S. and Shende, M.R., 2015. Supernumerary Bones in Superior and Inferior Extremity. *Forensic Medicine & Toxicology*, 9(1), p.1198.

2. Gursoy M, Coban I, Mete BD, Bulut T. The Incidence of Accessory Ossicles of the Wrist: A Radiographic Study. Journal of Wrist Surgery. 2021 Oct;10(05):458-64.

3. Le Minor J, M: The Sesamoid Bone of Musculus abductor pollicis longus (Os radiale externum or Prepollex) in Primates. Cells Tissues Organs 1994;150:227-231. doi: 10.1159/000147623