

Pictorial CME

Giant Cell Tumour of The 1st Metacarpal Bone Salvaged by Fibular Graft

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A 45 year male presented with a progressive painful swelling of 18 months duration of Left Thumb. There was no history of trauma and the movement of thumb was grossly restricted. Local examination revealed a diffuse, tender, 5cm x 4.5cm x 4 cm swelling on the Dorso – ventral aspect of the thumb. [Fig 1(a)&(b)]. Physical examination showed a tender osseous mass over the left thumb. The Radiograph demonstrated a large expansile lesion involving the entire 1st Metacarpal with thin septae and associated soft tissue mass [Fig 1 (c)&(d)]. Chest Xray and screening laboratory tests were normal. MRI gave D/D of 1. Aneurysmal Bone cyst 2. Extensive Enchondromatous Lesion and 3. Giant cell tumor (GCT). FNAC suggested Benign GCT [Fig 1 (a,b,c,d)].

On surgery, the tumour was found to consist of brown cheesy material and was seen involving the surrounding soft tissue. The tumour was carefully removed along with a cuff of normal tissue and the proximal and distal joints were inspected. The Trapezium was partially eroded. An appropriate size Fibula Graft was taken, inserted into the troughs created in the remaining part of Trapezium and the Proximal Phalanx and fixed with K wire both proximally and distally aiming at fusion [Fig 1 (e),(f)]. The Histo pathology report suggested giant cell tumour (GCT). At 5 months follow up he has satisfactory function of left hand [Fig 2 (a to e)].

Our case is different from those reported because of the involvement of the 1st metacarpal bone which was totally eroded and had subarticular extension.^{1,2} The patient is a poor farmer and the only earner of his family. Salvage by Fibula in this case is innovative and very rare. The fusion was done so that the reconstructed thumb can touch the tip of little finger and

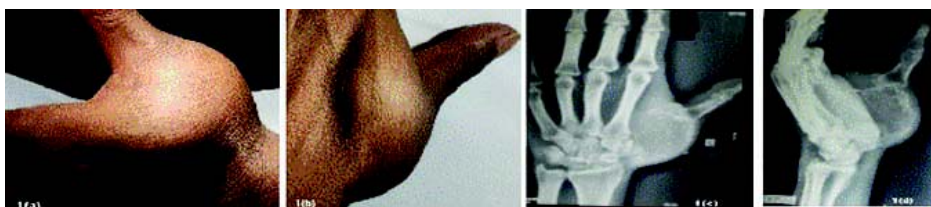


Fig 1 (a), (b) — Shows diffuse swelling on the Dorso ventral aspect of thumb

Fig 1 (c), (d) — Radiograph of hand AP and Oblique view revealed a large expansile lytic lesion involving the entire 1st Metacarpal with soft tissue involvement



Fig 1 (e) — Postoperative Xray AP and Oblique view demonstrating Fibula Graft with K wire Fixation

Fig 1 (f) Follow up xray showing incorporation of graft at 4.5mnths followup

for that the thumb was kept in opposition and DIP joint in 15 degrees flexion. The result and outcome is highly satisfactory. Informed consent was taken from the patient before publication of this clinical case.



Fig 2 (a to f) — At 5 months follow up he has satisfactory function of Left Hand

ACKNOWLEDGEMENT

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