

## Enchondroma Of Proximal Phalanx Of Little Finger: Augmentation With Cemented Internal Fixation

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### INTRODUCTION:

Enchondroma is a benign chondrogenic tumour composed of hyaline cartilage located within the medullary cavity. It is the commonest benign bone tumour found in the hand, but can also occur at the femur, humerus and tibia. Proximal phalanx is the commonest affected bone of hand followed by middle phalanx, metacarpals, distal phalanx and rarely the carpal bones. Removal by curettage and bone grafting is the most common treatment for enchondroma.

### MATERIALS & METHODS:

Recent study has shown that bone cement used as substitutes to bone graft can produce satisfactory comparable result<sup>1</sup>. We present a case of 29 years old right hand dominant lady, with complaints of worsening pain and swelling of left ring finger. Examination revealed swollen and tender proximal phalanx of left ring finger. Flexion of proximal interphalangeal joint (PIPJ) was limited. X-ray showed an expansile lytic lesion over subarticular region of proximal phalanx of ring finger with thinning of bony cortex. Pre-operative MRI reported features in keeping with giant cell tumour. She underwent curettage and bone cement with embedded cross k-wire insertion of proximal phalanx of left ring finger.

### RESULTS:

Histology from intra-operative tissue sample confirmed the diagnosis of enchondroma. Physiotherapy and hand function exercise was initiated immediately post operatively. At 1 month follow up, she regained full range of motion of left ring finger PIPJ and grip power of left hand. No sign of recurrence was detected at 1 year follow up.

### DISCUSSIONS:

Enchondroma is frequently treated with bone graft which acts as a biological reconstruction of

the defects. On the contrary, patient treated with cemented hardware can commenced immediate post-operative physiotherapy. In our case, early physiotherapy helped prevent joint stiffness. There are many expansile lytic conditions which can mimic the appearance of enchondroma for example aneurysmal bone cyst, giant cell tumour, fibroma and others.



Figure 1: Pre-operative left hand xray.



Figure 2: Post operative left hand xray with cemented k-wire fixation.

### CONCLUSION:

Treatment of enchondroma with curettage and cemented internal fixation should be considered to improve functional post-operative outcome.

### REFERENCES:

1. Enchondromas of the hand: Treatment with curettage and cemented internal fixation. J. Bickels, James C Wittig, Y.Collender, Kristen Kellar Graney, Kari L Mansour, I.meller, Martin M. Malawer. The journal of hand surgery/ vol.27A No. 5 September 2002