

A Rare Encounter: Radial Neck Osteochondroma Presenting As PIN Palsy

Zaharudin MF, Mohd Nasir MN, Abdul Rashid MA, Wan Nor WH, Arsad SR, MuhammadNawawi RF

Hand and Microsurgery Department, Hospital Selayang, Selangor

INTRODUCTION

Osteochondroma is a benign tumor of bone and cartilage occurring at metaphysis. Prevalence rate is challenging due to clinically silent. We present the rare case of osteochondroma of radial neck with posterior interosseous nerve palsy in 21-year-old.

CASE REPORT

He presented with right hand weakness and numbness for 2 years with progressive loss of motor function. Initial examination shows PIN palsy and palpable painless mass over lateral condyle of right elbow. radiograph of right elbow showed large lobulated dense osseous mass over radial neck. MRI subsequently obtain to look extension of mass.

Excision of osteochondroma of right radial neck and tendon transfer FCR to EDC and PL reroute to EPL was done via Kocher approach. Intra operative there was encapsulated cartilaginous cap at lateral aspect radial neck which made mechanical block during flexion and extension. Radial head dislocated for easier excision was done.



Figure 1: Radiograph AP/Lateral of right Elbow

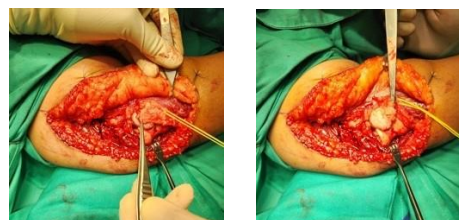


Figure 2: Intra-operative image

DISCUSSION

Osteochondroma is most common benign bone tumour, the place and association of PIN palsy is uncommon. In our case patient long-standing symptom suggest gradually nerve compression by growing osteochondroma. Location of it closed to PIN explains development of PIN palsy. Intra-operatively show PIN just above the osteochondroma. Timely diagnosis and intervention hold the potential to prevent nerve compression from progressing, potentially obviating the need for tendon transfer surgeries. The extended duration of symptoms suggests a potential for limited recovery of PIN function, as chronic nerve compression may lead to motor end plate degeneration.

CONCLUSION

Although radial neck osteochondroma associated with PIN palsy is rare, early detection is crucial for potential of recovery and prevent PIN from permanently damaged.

REFERENCES:

1. Gaumer GR et al. An Osteological Study on the Prevalence of Osteochondromas. Iowa Orthop J. 2017;37:147-150
2. Terra, Bernardo Barcellos et al. "Radial head fracture associated with posterior interosseous nerve injury." Revista brasileira de ortopedia vol. 51,6 725-729. 15 Oct. 2016