

Rare Case Of Proximal Ulna Osteosarcoma. Challenges In Management

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INTRODUCTION:

Proximal ulna is a rare site for osteosarcoma. A review over 27 years of 1650 osteosarcoma cases from Royal Orthopaedic Hospital in Birmingham revealed only 2 cases to originate from proximal ulna¹. We discuss the challenges of treating osteosarcoma at this rare site.

MATERIALS & METHODS:

A previously healthy 21 years old gentleman presented with a painful swelling over his left elbow for 5 months duration. He progressively lost the ability to fully extend the elbow and limitation in pronation and supination. After imaging studies, an open biopsy was done to reveal a conventional osteosarcoma. He underwent neoadjuvant chemotherapy with Doxorubicin and Cisplatin.

RESULTS:

Our patient had good clinical response to neoadjuvant chemotherapy. He underwent wide resection of proximal ulna with custom made endoprosthesis reconstruction. As the pre chemotherapy MRI showed soft tissue extension around the radial head, enbloc resection of proximal ulna with proximal radius was done.

DISCUSSIONS:

Proximal ulna is an extremely rare site for osteosarcoma. A review of 1650 osteosarcoma cases revealed only 2 cases of proximal ulna osteosarcoma¹. A 23 years multicenter review of osteosarcoma over upper limb, showed only 3 cases arising at proximal ulna². Being extremely rare, managing a proximal ulna osteosarcoma poses several challenges. 1)The surgical technique is not well described. 2)The implant need to be custom made and requires detailed planning in manufacturing it. 3)We assume it should behave as any other osteosarcoma although our patient presented at later age of 21 years old. 4) Long term oncological and

reconstructive outcome of such tumour is not documented in the literature.



Figure 1: MRI axial view of proximal forearm showing osteosarcoma of proximal ulna almost encasing the radial head



Figure 2: Proximal ulna custom made prosthesis insitu

CONCLUSION:

Proximal ulna osteosarcoma poses challenge to the treating surgeon as it is extremely rare. Treating it as any other osteosarcoma is probably the best treatment for proximal ulna osteosarcoma.

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