

PROXIMAL HUMERUS OSTEOSARCOMA 'WHOOPS': IS LIMB SALVAGE POSSIBLE?

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Introduction: Within a number of existing variants of osteosarcoma, telangiectatic osteosarcoma makes up 0.4-12%. It is often mimicked by benign lesion such as an aneurysmal bone cyst. Hence, a misdiagnosis is common.

Discussion: 8-year-old boy presented with a painful progressive swelling over the left shoulder for three weeks. X-ray and non-enhanced CT of the left shoulder showed an expansile multiloculated cystic lesion over the metaphysis of proximal humerus. He underwent curettage and bone grafting via posterior approach in a non-oncology centre and tumour histopathology report showed features of telangiectatic osteosarcoma. He was then referred to our centre. MRI of left arm was done, noted extent of 'contamination' from earlier procedure was minimal. Systemic staging was clear. Standard neoadjuvant chemotherapy was started followed by wide resection and endoprosthesis of the left proximal humerus. Incision was made over the posterior aspect of the shoulder incorporating the previous longitudinal scar. Posterior part of the deltoid was excised and deeper resection extended between the deltoid and lateral head of the triceps muscle. Resection was uneventful as the lesion was away from the neurovascular bundle. The vessels, rotator cuff tendons, biceps and triceps muscle and nerves (musculocutaneous, axillary, radial, median, and ulnar nerves) were spared. Intraoperative frozen section margin were clear and proceeded with endoprosthesis reconstruction. Post operative HPE showed HUVOS grade 4. Follow ups at 2 years noted patient was able to perform most activities of daily living without much limitations and had a functional score(MSTS) of 57% for the upper limb. He remains disease free at 2 years.

Conclusion: Principles of bone tumour biopsy is fundamental and osteosarcomas are advocated to be managed by an orthopaedic oncology surgeon to reduce the incidences of tumour spillage and contamination. Lastly, limb salvage surgery via posterior approach can be a feasible option instead of the conventional deltopectoral approach.