



55th Annual Conference of Orthopedic Surgeon Society of Andhra Pradesh

Date 6 – 8 February, 2026, Venue : Kurnool Medical College

Organized by : Department of Orthopaedics, Kurnool Medical College Kurnool



A CASE REPORT ON SECONDARY CHONDROSARCOMA OF ILIAC WING ARISING FROM MULTIPLE OSTEochondromatosis

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INTRODUCTION

- Multiple Osteochondromatosis is characterized by the presence of multiple benign cartilage-capped bone tumors arising from the metaphysis of long bones
- Majority of osteochondromas ossify and growth ceases upon skeletal maturity. But, rare lesions may demonstrate aggressive behaviour or undergo malignant transformation into secondary chondrosarcoma
- Primary pelvic sarcomas - chondrosarcoma and osteosarcoma are the two most common (chondrosarcoma frequently involving the iliac wing)
- Tumors in this region are frequently diagnosed at an advanced stage due to deep anatomical location and nonspecific early symptoms. As a result, they often present with substantial local extension, abutting or encasing critical neurovascular structures, bowel, and the genitourinary tract.



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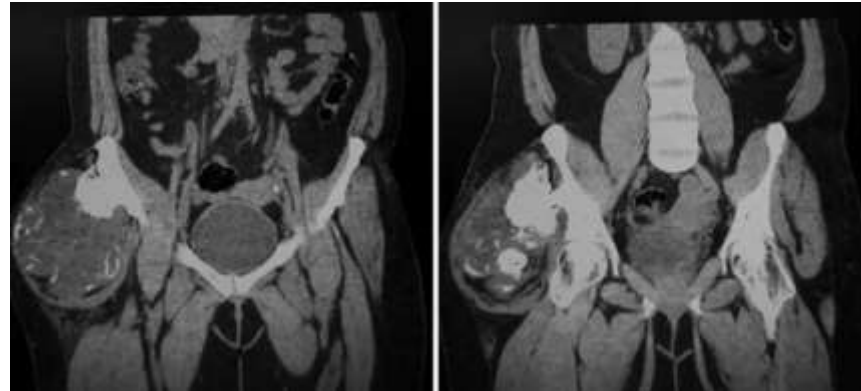
METHODS

- A 35-year-old female with hereditary multiple exostoses presented with a progressively enlarging, painful pelvic mass.
- Radiographs showed characteristic popcorn calcifications over right iliac wing with multiple sessile osteochondroma involving femoral neck and MRI showed a heterogenous mass of size 12.8cm x 11.5 cm x 11.5 cm in T2 weighted sequence suggested a malignant transformation
- PET CT showed increased tracer uptake localised to right iliac region.
- Core biopsy confirmed low-grade chondrosarcoma.

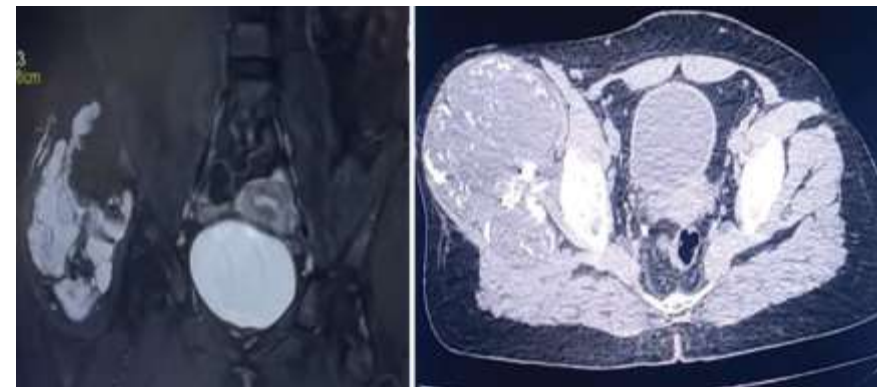
- A single-stage surgical resection was planned. The patient underwent a type I internal hemipelvectomy (iliac wing resection) with wide tumor-free margins
- Functional and oncologic outcomes were assessed on follow up

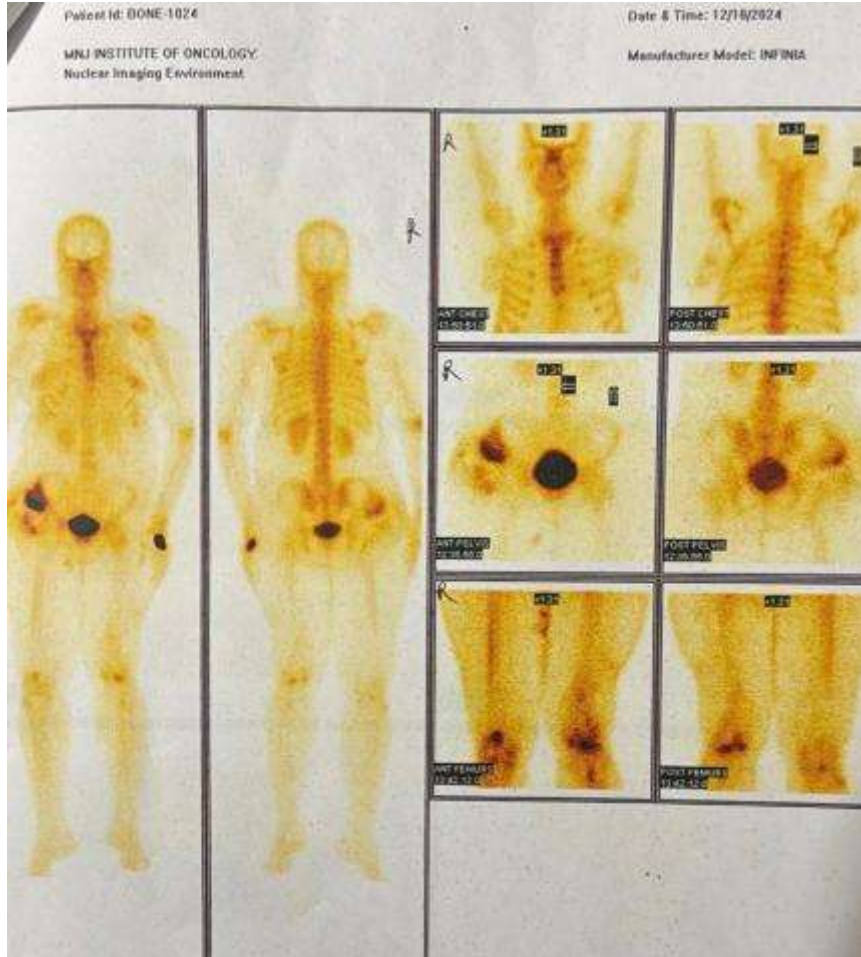


Plain radiograph of pelvis with both hips showing multiple exostosis with popcorn calcifications

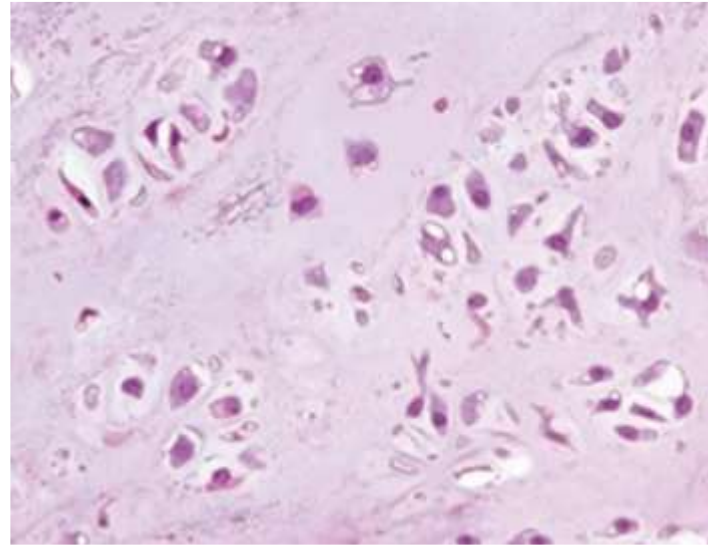


Magnetic resonance images showing tumour arising from the right iliac wing





Scintigraphy showing large irregular expansile osteoblastic lesion involving right iliac bone involving extraosseous tracer



Histopathology showing
Low-grade chondrosarcoma



Utilitarian pelvic incision



Intraoperative dissection - soft tissue and muscle attachments to tumor ; delineation of the entire tumor mass from iliac wing



Tumor measurement and biopsy scar is excised with wide margins



Closure of the surgical incision

RESULT

- At 6-month follow-up, the patient had returned to routine activities without significant pain.
- She exhibited a mild Trendelenburg gait attributable to abductor muscle resection



X-ray of the pelvis taken after pelvic resection type 1



Follow up X-ray after 6 months



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CONCLUSION

- Internal hemipelvectomy with wide tumor-free margins provides excellent local control and functional outcomes in carefully selected patients with pelvic chondrosarcoma.
- Large tumors necessitate prolonged operative times, increased blood loss, and intensive postoperative support.
- While postoperative infections remain a concern, they can be effectively managed with prompt antibiotic therapy and surgical debridement when necessary.
- Meticulous preoperative planning, surgical expertise, and multidisciplinary collaboration are essential for optimizing oncologic and functional results in the management of pelvic chondrosarcomas