

Rare Occurrence: Patella Bone Metastasis

¹Mohd Hafiz MZ, ²Ayunni A, ²Sobri Nor, ²Anwar Hau,

¹Department of Orthopedic, HUSM,

²Department of Orthopedic, HRPZ II

INTRODUCTION

Patella bone metastasis is a rare condition especially from primary colon tumour. We report a case of left patella bone metastasis secondary to recurrent recto-sigmoid adenocarcinoma.

CASE REPORT

A 67-year-old woman, previously diagnosed and completed treatment for rectosigmoid adenocarcinoma in 2017, experienced left knee pain and swelling. The pain worsened during activity, especially climbing stairs, and intensified at night. No infection symptoms were noted. Local examination showed significant swelling and bony tenderness over the patella, limiting range of motion. Knee radiograph revealed a lytic lesion on the inferior pole of the patella. Histopathological examination from core biopsy suggested adenocarcinoma, possibly recurrent from the previous rectosigmoid cancer. Further investigation and treatment for recurrent rectosigmoid adenocarcinoma was initiated by the colorectal team.



Figure 1: Osteolytic lesion at inferior pole patella bone

DISCUSSION

Patella bone tumors, both primary and metastatic, are exceedingly rare, constituting

less than 0.12% of all bone tumors. Primary tumours of colorectal that metastasis to patella contribute approximately 9% of all patella metastases.

Patients commonly present with anterior knee pain, swelling, and restricted range of motion. Clinical examination may reveal tenderness over the patella bone and limited range of motion. The clinical presentation can mimic infection.

Plain radiographs reveal osteolytic lesions with subchondral bone destruction in metastasis. Combination of plain radiographs with advance imaging is essential for assessing tissue involvement and precise tumor location.

Histopathological examination remains the gold standard. Core needle biopsy is recommended to minimize contamination risks. Caution is advised during biopsy to avoid joint involvement and minimize contamination.

Treatment options for patella bone metastasis encompass surgery, radiotherapy, and chemotherapy. Surgery such as bone curettage with bone graft, excision and patellectomy is typically reserved for symptomatic patients.

REFERENCES:

- 1) Li, G., Shan, C., Sun, R., Liu, S., Chen, S., Song & Lu, M. (2018). Patellar metastasis from primary tumor.
- 2) Merchán, N., Yeung, C. M., Garcia, Schwab, J. H., Raskin, K. A. (2022). Primary and Metastatic Bone Tumors of the Patella: