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Intraosseous synovial sarcoma of the proximal femur: Case report

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ABSTRACT

Synovial sarcoma is primarily a soft tissue malignancy that most often affects adolescents and young adults. It very rarely presents as a primary bone tumour and has only been reported in nine other cases to date. We report a case of primary synovial sarcoma arising from the proximal femur in a 57-year-old man.

Key Words:
Synovial sarcoma, primary bone tumour

INTRODUCTION

Synovial sarcoma forms a distinct clinical and morphological malignant soft tissue tumour that occurs primarily in the para-articular regions of the extremities. This tumour has a propensity to arise in the vicinity of large joints, especially around the knee region, although occurrence at other sites such as the head and neck, the trunk and abdomen has also reported[1]. Synovial sarcoma most often affects adolescents and young adults. The underlying bone tends to be uninvolved, but 15-20% of the cases show a periosteal reaction, superficial bone erosion or invasion. Rarely, massive bone destruction is caused by poorly differentiated synovial sarcomas of long duration and large size[1]. Synovial sarcoma very rarely presents as a primary bone tumour and to the best of our knowledge, only nine other cases have been reported to date. We report a rare case of primary synovial sarcoma arising from the proximal femur.

CASE REPORT

A 57-year-old man presented to Miri Hospital with a one week history of right thigh pain and swelling after allegedly fallen down during work. He had difficulty ambulating independently due to the pain. Initial radiographs suggested a pathological fracture of the right subtrochanteric femur and the patient was referred to Sarawak General Hospital in June 2010 for further investigation. Magnetic resonance imaging (MRI) showed an expansile lesion at the proximal femur in the intertrochanteric region (Figure 1). Computed tomography (CT) scan of the chest was negative for metastatic disease, and a bone scan showed increased vascularity and an increased soft tissue uptake. An incisional biopsy of the lesion was performed with results indicative of biphasic synovial sarcoma.

The patient subsequently underwent two cycles of chemotherapy. After completion of the two cycles of chemotherapy, the patient underwent a wide excision of the tumour at the proximal part of the right femur that also included the involved soft tissue; this was followed by reconstruction with bipolar proximal femoral tumour prosthesis. Intraoperatively, there was a fracture at the subtrochanteric region with tumour extension into the soft tissue. The tumour was highly vascular with multiple feeding vessels.

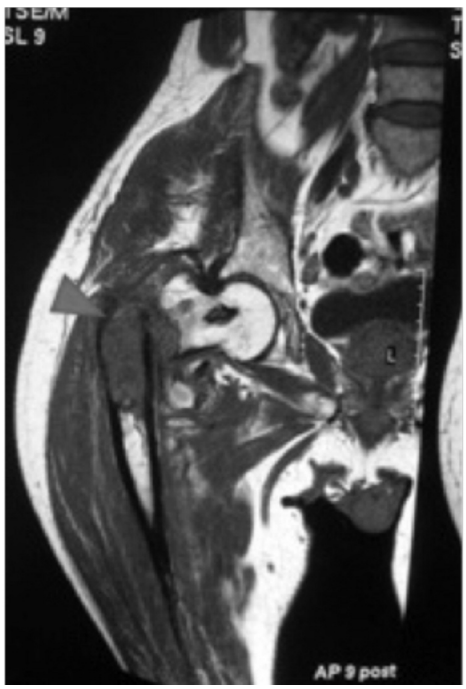

Fig. 1: Magnetic resonance imaging (MRI) showing an intraosseous lesion (arrow) at the proximal femur with an intertrochanteric fracture.

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