Primary malignant lymphoma of bone

Sir,

Primary Malignant Lymphoma of bone is a rare form of presentation of extranodal lymphoma. Literature search, to the best of our knowledge, has not shown more than 97 cases of malignant lymphoma presenting as primary bone tumor, particularly in the Kingdom of Saudi Arabia, this may be the first reported case. It may present as solitary lytic area or may have multiple bone involvement and may mimic other bone tumors. Our aim of this case report is to emphasize the importance of early differential diagnosis of lytic lesions of bone and their management.

A 29 year old male patient with good general condition presented with dull aching pain just distal to right knee for 2 months without any history of trauma, fever, weight loss or appetite loss. There was history of receiving a local injection at the site of pain and above knee Plaster of Paris (POP) cast at a private medical center few weeks before. It was probably done to relieve him temporarily of pain but further investigations were not carried out. Clinical examination revealed a local bony tenderness over the area of tibial tuberosity with no external signs of inflammation. Nothing else was significant locally. Conventional AP and Lateral x-rays showed a lytic bony lesion in upper tibia without cortical expansion. The bone proximal and distal to the lesion was normal (Figure 1). A provisional diagnosis of Chronic Osteomyelitis/Giant Cell lesion was made. Routine blood, urine, serum chemistry, and titre for brucella infection were all within normal limits.

Skeletal survey showed no other such lesion. Facilities for MRI and bone scan do not exist at our center. Patient was subjected to excisional biopsy by complete curettage of the lesion. Per-operatively the extent of lesion was beyond its radiological appearance. The cavity thus produced was packed with bone cement and an above knee POP applied to avoid pathological fracture. The biopsy report, unexpectedly, was consistent with a "Malignant Round Cell" tumor, or (to be more specific), Primary Malignant Lymphoma with the large B-cell phenotype (Figure 2). As the tumor is radiosensitive, the patient was subjected to combined radiotherapy and chemotherapy at an Oncology center. But his general condition continuously deteriorated. He did not survive for long and died within a year ultimately of chest infection.

Primary malignant lymphoma of bone is a rare form of Non-Hodgkin Lymphoma. The overall sex ratio shows preponderance of males with a M:F equal to 1.5:1 among the under forty year old patients. The age distribution may be bimodal, the second peak of incidence demonstrating a significant reversal of sex ratio with females being more commonly affected in the older age group. This rare tumor usually affects the metaphysis of long bones. It produces osteolytic changes and usually only mild periosteal reactions. Radiologically as well as histologically, differentiation from other highly malignant bone tumors is extremely difficult and sometimes impossible. A correct diagnosis can only be made from an accurate and detailed clinical assessment with localization of tumor and thorough investigations. Radiological appearance may be misleading and deceptive. Mulligan et al, 1993 recognized even the presence of sequestra radiologically giving rise to a picture like chronic osteomyelitis. This case report, therefore, is intended to impress upon the clinicians and radiologist that...
Primary Malignant Lymphoma can have unusual presentation mimicking benign radiographic osteolytic appearance thus requiring high index of suspicion. Early detection can be carried out by bone biopsy, if facilities for MRI and bone scan do not exist. This will increase the chances of early diagnosis of this rare tumor and better treatment results.

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References