Lipoma of the Bone

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Introduction

Lipoma is a benign tumour of fat arising within the marrow cavity. Lipornas of the bone are rare; Dahlin reported I per 1,000 tumours of the bone[1]. They occur in the skull, mandible, ulna, rib, fibula, tibia and os calcis[2]. The major problem of the liporna of bone lies in its radiographic differential diagnosis[3]. Clinically the lesion may be asymptornatic or cause swelling and discomfort.

Case Report

A fitly-one year old man reported to the outpatients department, Liaquat National Hospital, with a painful nodule on the distal end of the femur. The slowly growing nodule had grown to roughly 2 ems, in the last decade. The plain film radiographs showed a well-defined lytic lesion diagnosed as osteoid osteoma. The radiograph of the femur also showed a radiolucent mass with lobulated margins and strands of ossification in the distal third of the anteromedial aspect of the femur diagnosed as a periosteal lipoma. The surgical specimen of the first lesion was removed intact and sent to the pathology laboratory for histopathological diagnosis. it was a soft, yellow, well-circumscribed mass, measuring 2.5 ems, in length and 2.0 ems in diameter. The mass was enclosed in a thin rim of bone. Histopathological examination revealed mature adipose tissue containing atrophic bone trabeculae. The lesion was devoid of hematopoietic elements, dystroph ic calcification, haemorrhage or necrosis.

Discussion

Intraosseous lipoma is a neoplasm which has classically been regarded in the literature as a rare bone tumour. In fact the intraosseous lipoma is considered as the rarest benign primary tumour of bone. The occurrence is less than one per 1.000 bone turnout's. Because of its rarity and non-specific clinicopathological findings, large biopsy specimens are needed for an accurate diagnosis. Once diagnosis has been established, a conservative treatment protocol is mandatory. The prognosis is generally excellent, and recurrences have not been reported[4].

The tumour has several distinguishing characteristics on plain film radiograph, magnetic resonance imaging, and computerised tomography scan. Due to appearances that are similar to simple bone cysts, infarctions, and other lesions. intraosseous lipomas are often misdiagnosed, possibly accounting for their purported rarity[5].

Cases reported from various parts of the world. Include publications from the Mansoora University, Egypt[6], Russia[7], India[8], USA[9,10] Japan[11]. Portuguese[12] and Italy[13].

Till 1976 a total of thirty cases had been reported of intraosseous lipomas[14]. Subsequently eleven more cases were reported till 1997, bringing the total to forty-one. The most common presenting complaint was pain.

The differential diagnosis of intraosseous lipornas, on radiography is with certain dysplasic and neoplastic lesions of bone such as: bone cyst, non-ossifying fibroma, aneurysmal cyst, osteoblastoma. giant cell tumour, monostotic fibrous dysplasia, and solitary myeloma. As the cortex of the bone is sometimes destroyed it has been confused with a malignant neoplasrn. Complete removal is followed by cure.

Parosteal lipomas arising in the periosteum, fasciae and muscles only affect the bone secondarily by

compression or direct invasion. This tumour is also a rarity and a few case reports have been published[15-17]. Parosteal lipomas arising or atleast involving the periosteurn, cause symptoms by impinging on the nearby nerves.

Though i ntraosseous lipomas are benign turn ours with an excellent prognosis and 'no' recurrence, several cases have shown a malignant transformation. These lesions demonstrate radiological and histological features of benign lipomas together with histologic fields of either malignant fibrous histiocytorna or liposarcoma. These turnours were fatal despite amputation. Malignant transformation of a liporna should be suspected when rapid bone destruction is seen in a stage I radiolucent lipoma. Malignant transformation of stage Ill lipornas could be mistaken for malignant transformation within bone infacts[18].

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