



Case Reports

Eosinophilic Granuloma in the Shaft of the Femur

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Abstract

Eosinophilic granuloma, the mildest form of histiocytosis appears in children, adolescents and young adults, though most patients present before ten years of age and it may be solitary or multiple. Most of lesions appear in the flat bone, in skull or in vertebral body. It may cause collapse of vertebra, which is called Vertebral plana. Eosinophilic granuloma in the diaphysis of femur is not common; so we are encouraged to report the case.

TAJ 2001; 14(2): 88-89

Introduction

The bony lesions of histiocytosis consist of histiocytes along with variable number of eosinophils, lymphocytes and neutrophils. They cause bone destruction and frequently bone reaction that mimics benign and malignant neoplasms as well as osteomyelitis.

Eosinophilic granuloma involves only bones and affects older children and young adults. Litterer- Siwe disease and Hand -Schuller-Christian disease cause severe systemic illness in young children. patient rarely present to physicians because of skeletal involvement alone.

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Case history

Master X, a male boy of 6 years and 6 months was admitted with the complaint of swelling and pain in right thigh for about 2 month. The swelling was slow growing in nature, and the pain was mild and was occasional exacerbation at night. There was no history of fever and weight loss. General health of the boy was average; vital parameters were within normal limits. There was spindle shaped swelling in the upper third of right thigh which was mildly tender, overlying skin was healthy, there was no engorged veins. The swelling was hard fusiform and seems to be in the upper third of the right femur.

X-ray finding was a well demarcated oval area of radiolucency within the shaft of upper third of right femur with sclerosis of the medial cortex. Blood picture and other investigations were within normal limit.

On 14.03,2001 patient was operated, the cavity was found filled with reddish soft cellular tissue, after wide decortication, the lesion was

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curetted meticulously and the incision was closed in two layers keeping a drain. The limb was no back slab for six weeks, with the advice to bear no weight.

The curetted tissue was sent for histopathology and for culture sensitivity. The histopathology report was, fragmented pieces of tissue showing proliferation of Langerhans cells mixed with eosinophils, compatible with Langerhans histiocytosis (Eosinophilic granuloma).

Concomitant follow up since 14.03. 2001 was satisfactory, curetted lesion was found relatively less radio opaque than the normal. Swelling was not increasing and the pain was mild. The patient was allowed to bear partial weight with the aid of crutches after two months of operation and to bear full weight after three months of operation.

Discussion

The lipid storage disorders, which Liechtenstein (1964) grouped as histiocytosis X may cause osteolytic lesions resembling, bone tumour.²

The age of diagnosis and severity of the disease separate histiocytosis into three

overlapping disorders; two disorders, Litterer-Siwe disease and Hand-Schuller-Christain disease, involved multiple tissues and affect young children, Eosinophilic granuloma in long bones generally occurs in the diaphysis and stimulate a periosteal reaction that makes them resemble osteomyelitis or Ewing's Sarcoma. Eventually Eosinophilic granuloma involving bone heal spontaneously, but establishing diagnosis, relieving pain, of preventing pathologic granuloma usually leads to their resolution, and steroid injections also may cause these lesions to heal.

Occasionally dissemination to the multiple from occurs, usually within a year of diagnosis. The disseminated form has been treated with radiotherapy, steroids, chemotherapeutic agents (such as vinblastine) and thymic extract, all with varying success.³

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