

## Ewing's Sarcoma of Big Toe

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### Abstract

Extrasosseous Ewing's sarcoma of the big toe with metastasis to lung in an eighteen year old male because of rarity is presented.

### Key Words

Ewing's sarcoma, Metastasis, Chemotherapy

### Introduction

Ewing's sarcoma is usually identified as a primary malignancy of bone affecting children and young adults. Extra skeletal Ewing's sarcoma is rare and has been reported in trunk, extremities, uterus, cervix, vagina etc. They have very rarely been reported in cutaneous and subcutaneous locations. We present a case of extrasosseous Ewing's sarcoma of the big toe with metastasis to lung.

### Case Report

An 18-year-old male reported with history of swelling left great toe of 4-year duration with occasional history of pain (Fig 1). X-ray of the foot showed some scalloping of outer margin of terminal phalanx of big toe (Fig 2) He underwent minor surgical intervention 3 years back and no biopsy was taken. He was asymptomatic for about 2 years but subsequently complained of pain He complained of high-grade fever with sweating and pleuritic chest pain. X-ray chest revealed pleural effusion with multiple cannon ball shadows in both lung fields (Fig 3). Biopsy of the lesion of big toe revealed features of round cell tumour consistent with Ewing's sarcoma (Fig 4). Chemotherapy was started in 9 cycles. He received Ifosfamide, cisplatin during first cycle and

cyclophosphamide, adriamycin and vincristin during 2nd cycle. These were repeated alternately upto 6 cycles. During 7th cycle he received etoposide, cyclophosphamide and during 8th cycle etoposide and ifosfamide. Finally during 9th cycle cyclophosphamide, adriamycin and vincristin were given. The metastatic shadows in the chest disappeared. The big toe showed swelling on dorsolateral aspect which produced deformity of the overlying nail. Amputation of the big toe was done through meta-tarsophalangeal joint and patient is still alive, under treatment of medical oncology after 4 ½ years from the day of presentation.

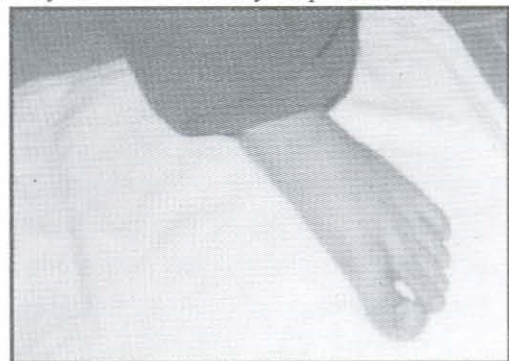


Fig. 1. Clinical Photograph showing deformity of nail with swelling along dorsolateral aspect of big toe.

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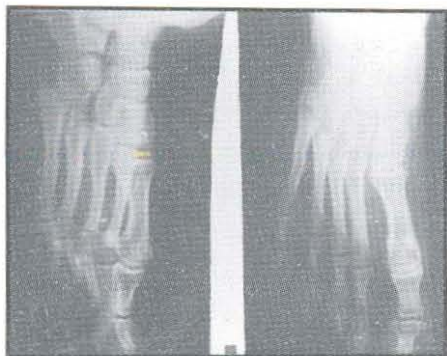


Fig. 2. X-ray showing normal distal phalanx of big toe except some scalloping of outer aspect of terminal phalanx of big toe.

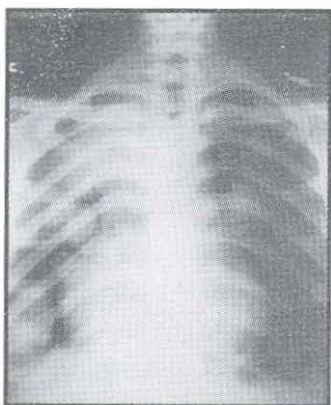


Fig. 3. X-ray chest showing multiple metastatic lesions.



Fig. 4. Histopathological examination finding consistent with round cell tumor.

### Discussion

Ewing's sarcoma is a highly malignant neoplasm of bone, which usually occurs during childhood. Extra osseous Ewing's sarcoma are rare and have been reported in trunk, extremities, uterus, cervix, vagina, rectovaginal tissue, ureter, kidney (1-6).

The occurrence of tumour in a primary cutaneous or subcutaneous sites have rarely been reported (1). Chow

*et al* reported 14 patients with cutaneous or subcutaneous Ewing's sarcoma with mean age of 16 years. The sites include trunk, and pelvis, upper or lower extremity, head and neck. Patients received chemotherapy in the form of vincristin, doxorubicin, cyclophosphamide, ifosfamide, etoposide or dactinomycin. None of the patient had metastatic disease at presentation. They found indolent course and favourable prognosis when these were treated with combination modality therapy (1).

Ahmad *et al* found age and surgical treatment as an important prognostic factor in the treatment of Ewing's sarcoma. The size of the lesion and the presence of the metastatic disease at the time of diagnosis were not found significant prognostic factors (2). The superficial variant may be less aggressive than more common bony and soft tissues counterparts with an apparently favorable outcome (1).

The case under consideration is a subcutaneous variety of extraosseous Ewing's sarcoma with lung metastasis and is surviving 4 years after presentation.

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