

Early Stage Carcinoma of the Uterine Cervix Presenting with Bone and Marrow Metastasis.

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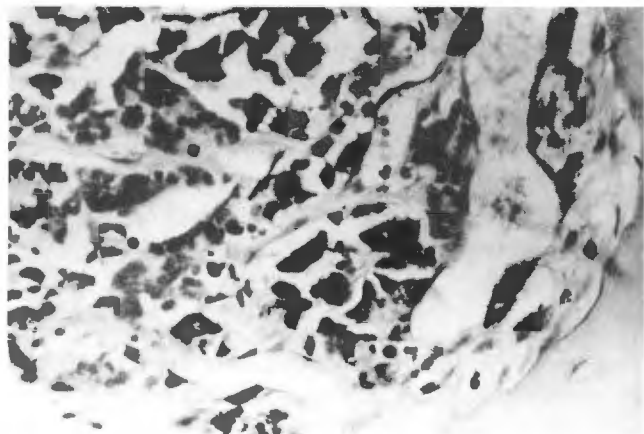
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Introduction

Carcinoma of the uterine cervix spreads by local infiltration and through lymphatic and blood pathways. A hematogenous spread occurs in advanced stages of the disease to lungs, liver and bones. Bone and marrow involvement in early stages of the disease is very rare.

Case Report

A 28 year old woman was referred to our centre with carcinoma of the uterine cervix, stage 2 B (Large cell keratinizing type) and weakness. Examination revealed pallor and there was no palpable lymph node. Systemic examination revealed a grade three systolic murmur audible all over the precordium. Hemoglobin was 5.7g/dl, total white cell count - 2700 / mm³, N-58%, L-40%, E - 2%, Platelet count - 28000 / mm³. MCV-85%, MCHC - 35% and MCH-30 µg/m. The peripheral smear revealed pancytopenia. The marrow aspiration demonstrated reduction of normal hemopoietic elements and a few tumor giant cells. The bone marrow trephine biopsy was hyper cellular, malignant cells were arranged in clusters and with fibrosis suggesting metastasis (Photograph 1). Chest X-ray was normal and



Photograph 1 : Bone marrow biopsy showing extensive infiltration by carcinoma

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ultrasound scanning revealed a four cm mass in the region of the cervix. A technetium scanning revealed areas of uptake in the 8th and 10th ribs on the left side.

Discussion

The incidence of bone marrow metastasis in cancer of the cervix is not known while bone metastasis is documented in 0.5% of patients presentation and in 16% on autopsy¹. Bone marrow metastasis is suspected when subjects present with abnormal hemogram and a leucoerythroblastic blood picture. Diagnostic confirmation is by bone marrow trephine while immunohistochemistry, polymerase chain reaction, and flow cytometry enhance sensitivity of detection. Gynecologic tumors rarely spread to the marrow, hence bone marrow trephine biopsy is not routinely undertaken in the staging work up of cervical cancers². However in patients with extensive skeletal metastasis, the incidence³ may be higher. Cohen et al⁴ have demonstrated marrow involvement in 36% of subjects with abnormal x-ray, bone pain and abnormal isotope bone scan. When bone marrow is the site of metastasis, most subjects develop progressive pancytopenia, bleeding and infection which terminate fatally.

In the absence of definite treatment recommendations, subjects are treated with radiation and chemotherapy (cisplatin, bleomycin).

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