



A Rare Case of Ewing's Sarcoma in Young Woman in Iraq

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Abstract

This report involves a case of Ewing's sarcoma in a 21 years old woman presented with abdominal pain and severe vaginal bleeding. It is very rare disease where only few cases have been reported in the literatures so far. The clinical diagnosis was confirmed by U/S and MRI. The diagnosis was confirmed after surgical removal of the mass by histopathology and immunohistopathology. The clinical management and treatment included surgical operation and chemotherapy. Therefore, in spite of the rarity of this tumour, differential diagnosis should be done specially among young women.

Introduction

Ewing's sarcoma is a primary malignant disease of the flat bones and truncal skeleton affecting young adults. It is sarcoma-primitive neuroectodermal tumour, or (ES/PNET) that arises from bones or rarely from soft tissues. ES- PNET is group of tumors thought to be derived from fetal neuroectodermal cells that has morphologic features of small round cell tumors with variable degrees of neural, glial and ependymal differentiation. It is due to translocations involving EWS-FLII genes in approximately 85% of all cases [1,2].

Extra-skeletal Ewing's sarcoma though rare is found to arise from the chest wall, para-vertebral muscles, retroperitoneal space, extremities and buttocks [3,4]. The incidence of cancer during pregnancy is as low as 0.07% to 0.1% [5]. The hormonal, physiological and the mechanical changes that occur during or after pregnancy induce or accelerate the growth of tumors and their spread. It has been suggested that few tumors in the pelvic region might as well occupy the space of the enlarging uterus or the fetus, such as pubic osteosarcoma or Ewing's sarcoma or may even spread to placenta and fetus in extremely rare instances [6].

Ewing's sarcoma rarely occurs in the genital tract of women and until now, only 48 cases have been recorded in the literatures [7]. Thus, this is another case of this malignancy and therefore it should be taken into account in the differential diagnosis of genital neoplasms specially among young women.

Case Presentation

A 21 years old woman, she is widow one year ago and she has one 3 years old girl. She was admitted to the Department of Gynecology and Obstetrics, Maternal and Child Hospital, Basrah, Iraq. She has developed offensive vaginal bleeding for months then she developed sever attacks of vaginal bleeding with passage of offensive flashy tissue with abdominal Pain. She was depressed and pale.

Pelvic examination:- huge growth involved the whole cervix rounded about 11 cm in size mobile easily bleed on touch, U/S and MRI examination revealed the presence of big cervical mass with complex echogenicity, 12 cm in diameter.

Biopsy from the mass was taken which was diagnosed as squamous carcinoma. Arrangement for laprotomy was done after clinical assessment and blood correction. A clear cleavage plane allowed a dissection of the mass from the surrounding tissue (Figure 1). The final histopathological and immunohistochemistry examinations revealed a positive reaction for CD99 suggestive of extra-skeletal Ewing's sarcoma. The patients underwent chemotherapy at the Oncology Centre in Basrah Province.

Discussion

Primitive neuroectodermal tumours are very rare in the genital system of women. Ewing's

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Figure 1: Shows the Ewing's sarcoma along with affected uterus.

sarcoma may occur rarely in the ovary, vulva, vagina, cervix and uterus [8-10]. Clinically, abnormal vaginal bleeding was the most common presenting complaint. Ewing's sarcoma family tumour is a group of small round cell tumours, characterized by the specific translocation t (11;22) (q24; q12) and the specific transcript FLII/EWS and by the common subvariants that in chromosome 2 and EWS gene with chromosome 21, 17, or 7 [7]. Since, most cases of Ewing's sarcoma occur in the postmenopausal period [2], a very limited experience is available on diagnosis and treatment of cases occurring in a very young women. The available treatment is the radical hysterectomy which has been performed for this woman. Now, she is receiving chemotherapy at regular intervals and she is in a good condition. In fact, the response to chemotherapy is more than 80% of patients [7].

In conclusion, primary cervical Ewing's sarcoma is a rare and aggressive malignant disease that requires early diagnosis and treatment. In spite of that, differential diagnosis should be done for small cells malignancy of the cervix.

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