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Case Report

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

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ABSTRACT

This reports a 21-year-old woman with Ewing's sarcoma, who presented with abdominal pain and severe vaginal bleeding. This condition is rare and only few case reports are available. The clinical diagnosis was made by ultrasound and magnetic resonance imaging, which was confirmed by histopathology and immunohistochemistry on the resected tumor. The treatment of choice included surgical removal and chemotherapy. Ewing's sarcoma should be listed as a differential diagnosis of this manifestation.

INTRODUCTION

Ewing's sarcoma, neuroectodermal tumor, is a malignant disease primarily affecting the flat bones, truncal skeleton, or connective tissues in young adults. ES-PNET is group of tumors thought to be derived from fetal neuroectodermal cells. This tumor has characteristic morphologic features: 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 has been found to arise from the chest wall, para-vertebral muscles, retroperitoneal space, extremities, and buttocks [3,4]. The incidence of cancer during pregnancy is reported to be 0.07-0.1% [5]. The hormonal, physiological and the mechanical changes that occur during or after pregnancy induce or accelerate the growth of tumors and their spread. Few tumors in the pelvic region might occupy the space of the enlarging uterus or the fetus; however, pubic osteosarcoma or Ewing's sarcoma are previously reported to develop in pelvis of the pregnant women. In rare cases, they may even spread to placenta and fetus [6].

Ewing's sarcoma rarely occurs in the genital tract of women and to our knowledge, only 48 cases have been recorded [7]. We here report a case of Ewing's sarcoma of the female genital tract.

CASE REPORT

A 21-year-old 1-para woman was admitted to the Department of Gynecology and Obstetrics, Maternal and Child Hospital, Basrah, Iraq. She had vaginal bleeding for several months, and then she developed severe vaginal bleeding this time.

Pelvic examination revealed huge mass involving the whole cervix, which was round with 11 cm diameter. It was mobile and easy to bleed. Ultrasound and Magnetic Resonance Imaging (MRI) revealed the presence of big cervical mass with heterogeneous echogenicity, with 12cm in diameter.

Biopsy revealed squamous carcinoma. Arrangement for laparotomy was done after clinical assessment and blood correction. A clear cleavage plane let us consider that a dissection of the mass from the surrounding tissue might be possible: we performed radical hysterectomy (Figure 1); the patients agreed that future fertility cannot be preserved.

The histological 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 and she is in a good condition at the time this writing.

DISCUSSION

Primitive neuroectodermal tumors rarely develop in the female genital organs. Reports indicated that Ewing's sarcoma can 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 consists of small round tumor cells, characterized by the specific translocation t (11;22) (q24; q12) and the specific transcript FLII/EWS. There are also some common subvariants that in chromosom2 and EWS gene with chromosome 21, 17, or 7 [7].

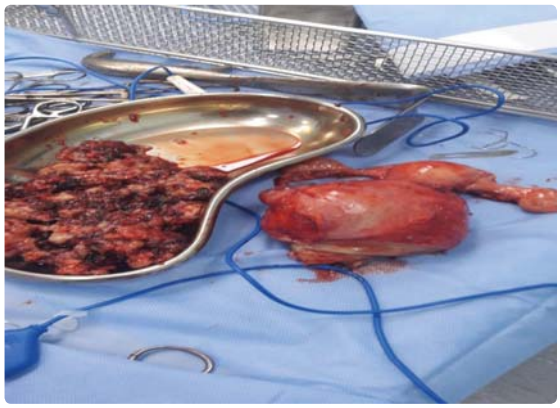

Figure 1: Resected tumor (radical hysterectomy was performed).

Most cases of Ewing's sarcoma occur in the postmenopausal period [2], and, thus, a very limited experience is available on diagnosis and treatment of young-woman' case. The available treatment is the radical hysterectomy, which has been performed in this patient. Response rate to chemotherapy has been reported to be 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. Differential diagnosis should be done for small cells carcinoma of the cervix.

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