Termination of Pregnancy in a Patient with Advanced Ovarian Cancer

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Ovarian cancer during pregnancy is a rare entity and the management of the disease can be challenging for the patient and the clinician. In this case, we report a case of advanced ovarian carcinoma diagnosed during pregnancy, which was managed with termination of pregnancy and chemotheraphy. The patient was underwent exploratory laparatomy including the right ovarian cystectomy, omentectomy, appendectomy, pelvic and para-aortic lymphadenectomy after frozen section of borderline serous cystadenocarcinoma at the 14 week of gestation. After final histopathology, the patient was staged as having FIGO stage IIIC disease. The pregnancy was termineted with the decision of patient and her family. The patient was treated with chemotheraphy.

Key Words: Ovarian carcinoma, Pregnancy, Management

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Introduction

Ovarian malignancy is estimated to occur in approximately 2% to 3% of the masses identified during pregnancy,[1-4] and it has an incidence of 1.10,000 to 1.50,000.[5] The management of pregnant patients with a malignant ovarian neoplasm is similar to what is recommended in the nonpregnant state. Therefore the surgical staging procedures are required in two situations The primary difference lies in considering adjustments in the surgical and/or chemotherapy treatment to allow for fetal viability if the patient desires the preservation of pregnancy. A limited delay in the timing of definitive surgical resection or chemotherapy until delivery could result in a worse prognosis in a patient with obvious metastatic disease.[6] We here report a case of advanced ovarian cancer diagnosed during 14 weeks of gestation, which was terminated after consideration with the patient and her family.

Case Report

In October 2007, a 24-year old woman, gravida 2 para1 (a previous cesarean section), was referred to our clinic with asymptomatic adnexial masses. Ultrasonographic examination revealed the presence of a complex cystic solid masses measuring 8x9 cm in diameter on the right ovary and a viable fetus at the 14th weeks of gestation (figure1). The adnexial mass was strongly vascularized at Color Doppler. The patient had no history of ovarian, colon, or breast cancer in the family. CA125, CA15-3 and CA19-9 were in normal ranges. Other laboratory findings were also normal.

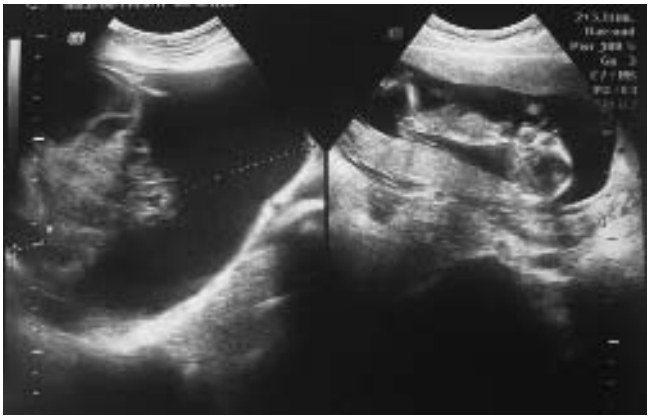

Figure 1: Ultrasonographic appearance of ovarian mass and pregnancy

At 14th weeks of gestation, exploratory laparotomy was planned and the patient was underwent surgical operation for adnexial mass. During laparotomy, only right ovarian cystectomy was performed and the specimen was examined for frozen section by a pathologist. The result of frozen section revealed a borderline serous cystadenocarcinoma (grade1), and thereafter total omentectomy, appendectomy, pelvic and para-aortic lymph node sampling, peritoneal washing and multiple

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peritoneal biopsies were performed. No macroscopic disease has been identified on peritoneal surface. The final histopathological diagnosis gave a result of papillary serous cystadenocarcinoma (grade1) with negative involvement of the omentum and appendix, but perilymphatic invasion was positive for tumour involvement. After these findings, the patient was staged as having FIGO stage IIIC disease.

After this situation was discussed with the patient and her family in detail, the patient requested the completion of surgery with the termination of pregnancy. Written informed consent was obtained to perform the second surgical operation with the termination of pregnancy. During second-look laparotomy, total abdominal hysterectomy and bilateral salpingo-oophorectomy was performed. No peri- or post-operative major complications were observed. Patient was than submitted to 6 cycles of adjuvant chemotherapy (carboplatin + paclitaxel). The CA-125 tumor marker was recorded as 23,4U/mL after adjuvant treatment. Routine follow-up procedures were started by oncology clinic.

Discussion

Ovarian cancer can occur at any age or period of the life, including childhood and adolescence or pregnancy. Ovarian cancer during pregnancy represents a clinical dilemma between the best treatment of the mother and the preservation of the pregnancy. Surgical intervention during pregnancy is indicated for large and/or symptomatic tumors and those that appear highly suspicious for malignancy on imaging tests.[7] The extent of surgery depends on the intraoperative diagnosis of a benign versus a malignant tumor. Conservative surgery is appropriate for benign adnexial massses and borderline ovarian tumors. More aggressive surgery is indicated for ovarian malignancies, including surgical staging.

Previous studies reporting medical and surgical management of ovarian cancer during pregnancy revealed that the primary surgery at diagnosis consisted of ovarian cystectomy, unilateral salpingo-oopherectomy (USO) only, or USO + multiple biopsies or more radical suegery with USO, infracolic omentectomy, peritoneal biopsies, and pelvic-paraaortic lymph adenectomy.[8,9] We performed the first surgical intervention with the preservation of the ovaries and the pregnancy due to the diagnosis of intraoperative frozen section which gave result as a borderline tumour. After correct staging of final histopathology with papillary serous cystadenocarcinoma, we completed the surgery with the termination of the pregnancy because of request of the patient and her family. The two operations at diffrent times was carried out to the patients due to the different results of intraoperative and postoperative diagnosis of the mass.

Cystic adnexal masses less than 5 cm that are detected in the first 16 weeks are usually functional and almost always resolve spontaneously.[6] Ovarian tumors that persist beyond 16 weeks are more likely to be neoplastic; and, therefore, are more likely to result in surgical intervention.[10] If an ovarian malignancy is present, then there are also risks of the cancer and the consequences of its treatment as well. The use of chemotherapy in pregnant women with ovarian carcinoma is very rare and characterized by a different timing in the administration of chemotherapy and integration with surgery. The main concern is the effect of the drugs on the developing fetus and long-term sequel in offspring born after exposure in the uterus. The effect of pregnancy on the pharmacology of the chemotherapeutic drugs is also an important issue.[11] A decision regarding sparing of the intrauterine pregnancy is based on gestational age. In the first trimester, sacrifice of the pregnancy may be the best choice, because exposure to subsequent chemotherapy may be teratogenic. Likewise, we selected the termination of pregnancy at early second trimester after consideration with patient.

The preservation of pregnancy should be discussed with caution in a case of ovarian malignancy diagnosed during the first or early second trimesters of pregnancy due to well described risks of chemotherapy during this period. For adnexal masses removed during pregnancy, frozen section is useful but when there is clinical suspicion surgical staging should be performed.

İleri Evre Over Kanserli Bir Hastada Gebeliğin Sonlandırılması

Gebelikte over kanseri oldukça nadir görülen bir durumdur ve hastalığın yönetimi hem hasta hem hekim için uğraştırıcı olabilmektedir. Biz bu olguda, ilk olarak gebelik sırasında tanısı konulan ve gebeliğin sonlandırılması ile tedavi edilen ileri evre bir over kanseri olgusu sunduk. Tanısı konulduğunda 14.gebelik haftasında olan hastaya ilk laparatomi esnasında, intraoperatif frozen sonucunun borderline seröz kistadenokarsinom gelmesi üzerine, sağ ovaryan kistektomi, omentektomi, appendektomi ve pelvic-paraaortik lenfadenektomi uygulandı. Postoperatif histopatolojik değerlendirmede hastaya FİGO evre IIIC seröz kistadenokarsinom tanısı konuldu. Hasta ve ailesinin kararıyla gebelik sonlandırılıdı ve kemoterapi tedavisine başlandı.

Anahtar Kelimeler: Over kanseri, Gebelik, Yönetim

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