

Case Report

Clinical Case of Synchronous Endometrial and Ovarian Cancer Associated with Pregnancy

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- Synchronous cancer
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Abstract

Relevance: According to various literature sources, in the general population of women with synchronous endometrial cancer and ovarian cancer is quite rare. We have not found a single foreign or domestic literary source describing clinical cases of primary multiple malignant tumors (PMZO): synchronous endometrial cancer and ovarian cancer associated with pregnancy.

Description: We present an interesting clinical example that clearly demonstrates the possibility of successful treatment of this variant of PMZO - synchronous endometrial cancer and ovarian cancer associated with pregnancy. The features of the course of the disease, the features and difficulties of treatment of this pathology are shown. And also the high efficiency of the treatment was shown according to the morphological study with an assessment of the drug pathomorphosis according to Lavnikova.

Conclusion: A case of successful combined treatment is presented, taking into account the combined pathology. According to the received data, it is possible to conclude. The management of pregnant women and the treatment of cancer should be carried out in specialized centers with experience in the treatment of oncological diseases associated with pregnancy.

INTRODUCTION

The combination of malignant neoplasms of the ovaries with pregnancy is rare and accounts for 3-6% of ovarian tumors, of which the incidence of epithelial ovarian cancer is only from 1/12 000 to 1/50 000 pregnancies.

According to various literature sources, cases of only twenty-three patients with malignant ovarian tumors have been described against the background of pregnancy in the period from 1991 to 2020. The incidence of ovarian carcinoma complicating pregnancy was 0.083/1000 pregnancies. Of the 23 cases, only four (17.4%) were with invasive epithelial tumors. In this group, 16 healthy living children were registered, and two premature newborns died from respiratory distress syndrome [1-3].

On request, endometrial cancer associated with pregnancy in the literature, there is one clinical case report: preservation of reproductive organs and subsequent pregnancy in a patient with infertility, synchronous endometrial cancer and colon cancer associated with Lynch syndrome. The patient received

adjuvant immunotherapy with a PD-1 inhibitor for 1 year after the operation, but 4 months after the operation she successfully became pregnant and gave birth to a healthy baby at 36 weeks. Neither the mother nor the newborn had any side effects during 11 months of follow-up, including those related to the immune system [4-6].

Our detailed review of literature sources showed that in the general population of women with synchronous endometrial cancer and ovarian cancer is quite rare [7,8]. Thus, the analysis of the database of 56986 women with ovarian cancer showed only 3% of cases of synchronous endometrial and ovarian cancer [9,10]. According to various sources, various indicators of the frequency of occurrence of a combination of endometrial cancer and ovarian cancer are described in comparison with metastases of endometrial cancer to the ovaries [11,12].

We have not found a single foreign or domestic literary source describing clinical cases of primary multiple malignant tumors (PMMT): synchronous endometrial cancer and ovarian cancer associated with pregnancy.

We present an interesting clinical example that clearly demonstrates the possibility of successful treatment of this variant of PMMT during the pregnancy.

Patient H, 32 years old, applied for an appointment with a gynecologist at the Research Institute of Oncology of the Tomsk SRMI. Anamnesis collection showed that the patient has this pregnancy for the first time, desired, marriage for the first time. She was under the dynamic supervision of an obstetrician-gynecologist at her place of residence about pregnancy from 12 weeks, pregnant women were screened in due time, in which no gross malformations of the child were detected. It was also revealed that 2 weeks ago, at the maternity hospital at her place of residence, she underwent a planned surgical delivery by cesarean section at 40 weeks, in which, according to the protocol of surgical intervention, papillary growths were found in the bottom and along the back wall of the uterus. At the same time, the revision of the pelvis showed only slightly enlarged ovaries and a small effusion in the pelvic cavity. According to the planned histological examination and revision of histological preparations in the Department of Pathomorphology of the Tomsk Research Institute of Oncology, the following conclusion was obtained: within the preparations of the uterine body, the picture of endometrioid carcinoma Low-grade (G1-G2). The tumor sprouts the entire thickness of the myometrium. No convincing signs of vascular invasion were found. Fragments of a mature placenta of a typical histological structure with signs of vascular fullness, fragments of the umbilical cord without features (Figure 1).

The tumor is mainly represented by glandular-villous, compactly arranged sharply convoluted glandular structures of various sizes, with foci represented by cribriform structures and areas of microcellular structure. The epithelium of tumor structures is cylindrical, with eosinophilic cytoplasm, rounded and oval nuclei with finely dispersed chromatin, a distinguishable nucleolus in part of cells, and mitosis figures. Thus, a diagnosis was made (C 54.1) Cancer of the uterine body I st. (T1bNxM0).

Additional examination was carried out at the Tomsk

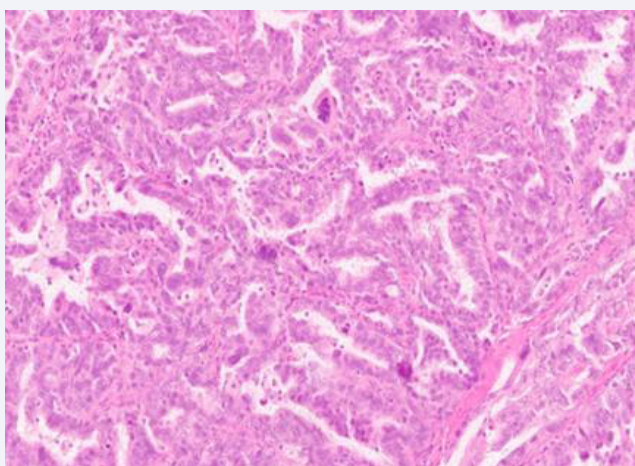


Figure 1 Endometrial biopsy.

Research Institute of Oncology: according to MRI, ultrasound of the pelvic organs, abdominal organs, retroperitoneal space, the presence of volumetric formation of the myometrium of the uterine body and volumetric formations of the ovaries was revealed. Ascites and carcinomatosis of the peritoneum as well. The MRI of the pelvic organs data are shown in Figure 2. Cancer markers were examined: CA125 - 1531 units/ml, HE 4 more than 1500 pmol/l (ROMA index > 99%). Taking into account the results of the examination, it was decided to conduct a surgical intervention. In this connection, laparotomy, surgical staging with express cyto and histological examination were performed.

Free fluid was found in the abdominal cavity, sent for express cytology, and a conclusion was obtained: glandular cancer cells.

During the revision, it was found that the uterus was enlarged up to 10 weeks with multiple papillary growths up to 10 mm. In the projection of the appendages, formations merging with each other, tightly soldered to the body of the uterus by the surrounding fiber, rectum, anterior wall of the sigmoid colon, forming a single conglomerate measuring 20x30x10 cm. On the parietal and visceral peritoneum, multiple rashes up to 20 mm (carcinomatosis) (Figure 3). The omentum was stony density,

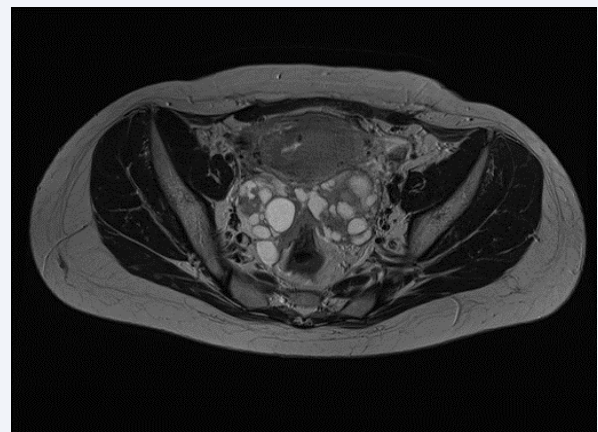


Figure 2 MRI of pelvic organs with intravenous contrast.



Figure 3 Laparotomy, surgical staging: multiple papillary growths along the peritoneum..

totally replaced by tumor tissue, is tightly fixed to the anterior abdominal wall throughout. According to the results of histology of ovarian tumor biopsy (№27077-81/22) High Grade serous ovarian carcinoma was obtained.

We conducted a molecular genetic study, the results of which revealed a germinal mutation of the BRCA1 gene: 300 T>G (cys61Gly). Further, a consultation with a chemotherapist was conducted, it was recommended to perform courses of polychemotherapy according to the scheme: paclitaxel + carboplatin with an assessment of the effect every 2 courses.

In dynamics during treatment after the 6th course of polychemotherapy, there was a decrease in tumor markers (CA125- 10.5 units /ml, HE4 - 84.4 pmol/L) and a decrease in tumor size according to MRI and ultrasound of the pelvic and abdominal organs. As a result, a decision was made on the expediency of cytoreductive surgery.

Next, we had a laparotomy, during the revision it was revealed that the uterus was enlarged 10 cm x 8 cm x 6 cm. In the projection of the appendages, there are three-dimensional formations on both sides, the sigmoid colon is fixed on the left. A large omentum with metastatic nodes is fixed to the anterior abdominal wall and intestinal loops in several places. As a result, a complete cytoreductive operation was performed in the volume of extirpation of the uterus with appendages, extirpation of the large omentum with intraoperative radiation therapy at a dose of 10 Gy. The histological conclusion: Residual High-grade serous carcinoma of both ovaries, carcinomatosis of the large omentum. There are multiple areas of perineural, lymphovascular invasion. Yellow body cyst in the left ovary. Chronic cervicitis without exacerbation. Proliferative endometrium with stroma fibrosis and the presence of intramural leiomyoma with hyalinosis and focal stroma calcification. Parametries of a typical histological structure. Therapeutic pathomorphosis of the primary tumor according to Lavnikova G.A.: III degree. Taking into account the data of previous histology No. 8252-54k\22: endometrioid carcinoma of the uterine body, low grade, G1-2 according to FIGO, IV degree of therapeutic pathomorphosis (according to Lavnikova) (Figure 4).

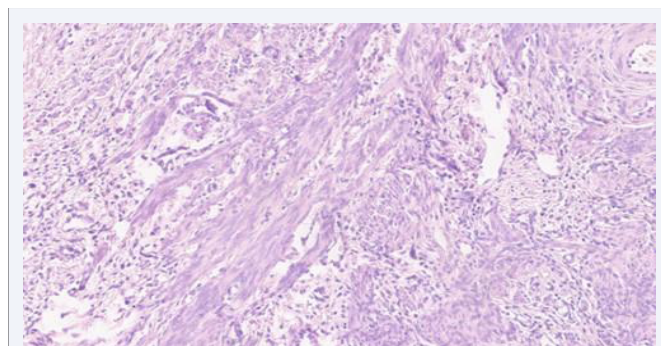


Figure 4 Proliferative endometrium with stroma fibrosis and the presence of intramural leiomyoma with hyalinosis and focal stroma calcification. Parametries of a typical histological structure.

Further, we decided to conduct courses of polychemotherapy in adjuvant mode, a total of 4 courses were conducted without signs of progression of the tumor process. Currently, the patient is receiving olaparib as a maintenance therapy (according to BRCA status). The patient tolerates the treatment satisfactorily, no adverse events were recorded.

Thus, we would like to note that the uniqueness of this case consists, firstly, in the presence of synchronous endometrial and ovarian cancer, and secondly, the association of this process with pregnancy.

We have not found any literary sources describing such clinical cases. In addition, it should be noted that our patient had a healthy female child, and given the presence of a germinal mutation in the BRCA1 gene and the possible inheritance of this mutation, in the future we will recommend genetic testing of the child and more careful monitoring in the future in terms of possible pathology of the breast and ovaries.

CONCLUSION

This clinical observation demonstrates a combination of primary multiple malignant tumors - synchronous endometrial and ovarian cancers associated with pregnancy. A case of successful combined treatment is presented, taking into account the combined pathology. According to the data obtained, it can be concluded that the treatment of patients with such pathology, taking into account pregnancy, is a difficult task and requires an individual approach to the choice of treatment tactics. The management of pregnant women and the treatment of cancer should be carried out in specialized centers with experience in the treatment of oncological diseases associated with pregnancy.

The study was approved by the Ethical Committee of the Research Institute of Oncology of the Tomsk SRI.

The patient signed an informed consent to the publication of her data.

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