

**Case Report**

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# A Case Report of Ovarian Asexual Cell Tumor Misdiagnosed as Ectopic Pregnancy

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Ovarian asexual cell tumor belongs to germ cell tumor; accounting for 1%-2% of ovarian malignant tumors, moderate malignancy, etiology is unknown, clinical rare. This article through to in June 2020, changzhou wujin's hospitals of traditional Chinese medicine of the clinical data of 1 case of patients with ovarian dysgerminoma were retrospectively analyzed, and the related literature review, the clinical doctors to improve the understanding of ovarian dysgerminoma, for the clinical diagnosis and treatment of cases related to provide some Suggestions, in order to avoid missed diagnosis and misdiagnosis of malignant tumor.

**Keywords:** Asexual cell tumor; HCG; Misdiagnosis

**Case Summary**

The 25-year-old female patient was admitted to Changzhou Wujin Hospital of Traditional Chinese Medicine (our hospital) on June 4, 2020 due to "menopause for 3+ months and pelvic mass found for 2 months". The patient's menstrual cycle was 37 days, and the last menstrual cycle was 7 days clean. The last menstrual cycle was in early March 2020 (details are not specified), and she did not take contraceptive measures. The patient had a small amount of vaginal bleeding since March 27 and went to the outpatient department of the First People's Hospital of Changzhou on April 1, solstice. Human chorionic gonadotropin (HCG) was 280.05mIU/ml. B-mode ultrasonography showed an anechoic area with a size of 8.7×5.3cm in the left adnexa, which was round in shape, with consistent internal echo, clear boundary and enhanced posterior wall echo. The thickness of the intima was 0.4cm, and there was no obvious free fluid dark area in the pelvic cavity. Considering the possibility of ectopic pregnancy, she was hospitalized. During the

hospitalization, she was given MTX75mg intramuscular injection to kill embryos twice. The re-examination on April 21 showed HCG of 151.26 miU /ml, and he was discharged from hospital. After discharge, the patient went to our hospital for regular reexamination of blood HCG, which showed an increasing trend. On May 29, B-ultrasound examination in our hospital showed that the endometrial thickness was 7mm, and the echogeness zone on the left side of the uterus was 71×58×48m, and the source of appendices was possible. June 3, HCG: 331.53mIU/m1, prepared by the outpatient department "Pelvis mass: ectopic pregnancy?" After re-admission, the blood test after admission showed hCG of 344.53mIU/ml, D-dimer of 1.15mg/ L, and no abnormality in blood routine, liver and kidney function, tumor indexes, etc. In addition to the surgical contraindications, laparoscopic combined exploration was performed under general anesthesia on June 5. No abnormality was found in the uterine cavity during hysteroscopic

exploration, and curettage was performed. About 3g of intrauterine material was curetted out, and the patient was sent for disease examination. Laparoscopic exploration showed normal size of uterus, no abnormal appearance of bilateral fallopian tubes, enlarged appearance of left ovary and cystic, and two cysts with sizes of about 4\*4cm and 6\*6cm, respectively, were observed inside the right ovary. Cyst excision was performed on the left ovary, and light-yellow cyst fluid was found in one cyst, and dark red clot was found in the other cyst. Send a medical examination. Intraoperative intrauterine injection of MTX40mg was successful. Blood HCG of the patients was monitored after surgery, showing an upward trend from June 6 to June 8 to June 12, HCG: 324.39mIU/m1-388.16mIU/m1-995.97mIU/m1. Postoperative pathology :(intrauterine) the endometrial of the daughter was in the hyperplasia stage, (left ovary) combined with immunohistochemistry, and this case was consistent with asexual cell tumor. Immunohistochemistry: Tumor cells EMA (-), CK (pan) (-), CK7 (-), D56 (-), CD10 (+), CD99 (+), CD117 (+), D2-40 (+), PAX 8 (-) - (-), Wr, Inhibin - a - 1 (-), Vimentin (-), Ki - 67 (+ 80%). The Department of Pathology of our hospital contacted the First People's Hospital of Changzhou City for consultation, and the consultation results were consistent, and the pathological diagnosis of asexual cell tumor was clear. After communication with the patient and her family members, the patient was recommended for further surgical treatment, postoperative radiotherapy and chemotherapy according to the situation, and the patient was required to be discharged from the hospital for treatment at the superior hospital and was discharged [1].

## Discussion

Ovarian asexual cell tumor is a germ cell tumor of moderate malignancy with unknown etiology and may be related to malformation of the reproductive system. It usually occurs in women of puberty and childbearing age, with an average age of 22 years. It accounts for 30% to 40% of ovarian germ cell tumors, but only 1% to 2% of all ovarian malignancies. Most of them were unilateral (about 90%). Clinical manifestations include abdominal distension, abdominal mass, or abdominal pain. Early symptoms are often asymptomatic, and about 2/3 of patients are admitted to the clinic in advanced stage. The tumor is round or oval in size, usually greater than 10cm in diameter. It is solid and fleshy in section, with punctate hemorrhage, necrosis, and cystic necrosis. Microscopically, it has a special morphological structure, usually composed of sheets or nests of polygonal cells with large nuclei and abundant cytoplasm [2].

Germ cell tumors can cause the increase of alpha-fetoprotein (AFP) and lactate dehydrogenase (LDH), and some studies have shown that LDH may be more sensitive than other tumor markers in patients with asexual cell tumor [2]. About 3%~5% of patients have slightly elevated blood HCG [3], which generally has no effect on the prognosis. Serum AFP, CA125, HCG and other tumor markers

can help the diagnosis. B ultrasonography is the preferred imaging method for ovarian tumors. The location, size and morphology of the tumor can be understood. CT can clearly show mass, ascites and lymph node metastasis, which is of great value in differentiating ovario-genic and non-ovario-genic tumors. MRI: With good soft tissue contrast, MRI can identify the properties of tumor contents, and can be used to determine the primary site and adjacent relationship of pelvic tumor, and can also be used to determine tumor stage, lymphatic metastasis and metastasis in other sites.

Most of the patients with asexual cell tumor are young and have fertility requirements, so the main treatment is surgical treatment to preserve fertility function, supplemented by postoperative radiotherapy and chemotherapy. The overall survival rate of patients with asexual cell tumor with standard treatment is more than 90%. Stages and tumor size (< 10 cm in diameter) of asexual cell tumor are important prognostic factors. For all patients with fertility requirements, regardless of any stage, a comprehensive staging operation to preserve fertility function can be performed, and the affected side appendages can be removed. Combined chemotherapy is generally preferred, such as BEP (bleomycin, etoposide, cisplatin) and TIP (paclitaxel, isophamide, cisplatin) regimens. The application of effective chemotherapy regimens can significantly improve the prognosis. Asexual cell tumor is highly sensitive to radiotherapy, but radiotherapy can damage ovarian function, so it is rarely used, only for the treatment of recurrent asexual cell tumor. The irradiation dose was 2500~3500cGy. During radiotherapy, the contralateral ovary should be covered to prevent it from being irradiated, so as to avoid the destructive effect of radiotherapy on normal tissues [4].

This example patient blood hCG slow rise with abnormal vaginal bleeding, combined with patient for women of childbearing age, clinical diagnosis is usually first consider pregnancy-related disease, such as ectopic pregnancy, threatened abortion, etc., these diseases (or) have the same clinical manifestations, after pregnancy often have the happening of the corpus luteum cyst, so the treatment on treatment of ectopic pregnancy, then observe the change of the cysts, Ovarian tumor is considered only if the cyst is persistent or enlarging [5].

In a retrospective review of this case, the patient could not provide a previous history of pelvic mass. Although multiple B-ultrasonography showed adnexal mass, the tumor indicators and LDH were normal. Therefore, it was misdiagnosed as ectopic pregnancy in the other hospital at first and MTX treatment was given. In our hospital, we subsequently received MTX treatment. Due to the poor treatment effect, laparoscopic combined exploration was performed after obtaining the consent of the patient, and ovarian asgenoma was still not considered during the intraoperative ovarian cyst excision, and the final diagnosis was determined by postoperative pathology.

Ovarian dysgerminoma is rare in clinic, but the literature is limited, the work because of lack of awareness of such tumors, easy to cause some cases of misdiagnosis, work reminds us that we encountered in the adult female blood hCG jump with abnormal vaginal bleeding, don't mind fixed only considering pregnancy related diseases, but also expand ideas, consider other diseases. In this paper, the case analysis and relevant literature review, so that clinicians to improve the understanding of ovarian asexual cell tumor; for clinical diagnosis and treatment of related cases to provide some suggestions, in order to avoid the occurrence of malignant ovarian tumor missed diagnosis, misdiagnosis.

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### Conflict of Interest

Authors declare no conflict of interest.

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