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## CLINICAL CASE OF TRANSITIONAL CELL CARCINOMA OF THE OVARY AS A PROBLEM OF THE IMPERFECTION OF THE SCREENING STRATEGY

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Summary

### АННОТАЦИЯ

Transitional cell tumors of the ovary are quite rare neoplasms and there is currently no single treatment strategy for this pathology. However, among gynecological malignant neoplasms, ovarian cancer has the highest mortality rate. Due to the lack of effective screening programs, only in 20% of cases it is possible to diagnose at stage I and II of the disease. Thus, early diagnosis is a challenge for oncologists around the world.

This article presents a clinical case of the problem of primary diagnosis of transitional cell carcinoma, for the analysis, which we conducted a literature review of the main methods of diagnosis of malignant tumors.

**Key words:** *transitional cell tumor, magnetic resonance imaging, oncomarkers, ultrasound diagnostics.*

Among gynecological malignant neoplasms, ovarian cancer has the highest mortality rate. The frequency of 5-year survival in patients with a progressive stage of the disease ranges from 20% to 25%. Due to the lack of effective screening programs and the asymptomatic course of the disease in the early stages, in most patients ovarian cancer (OC) is detected in the disseminated form and only in 20% of cases it is possible to diagnose stage I and II, which significantly reduces the effectiveness of primary treatment and has a negative effect on further prognosis of the disease [1].

Ovarian transitional cell tumors are a heterogeneous group of neoplasms united by a histopathological similarity with urothelium. They are divided into benign, borderline, malignant Brenner tumors and transitional cell carcinomas [2]. Ovarian transitional cell carcinomas were first described by Austin and Norris and are invasive tumors consisting of epithelial cells that resemble urothelium and contain neither benign nor borderline Brenner tumor components and are characterized by papillary structures lined with malignant cells of the transitional cell type, or nests of these cells in a fibrous or fibromatous stroma. The age of patients with transitional cell carcinomas varies from 30 to 94 (on average, 56) years. The clinical manifestations of these tumors are non-specific and include abdominal pain or discomfort, weight loss, bleeding from the external genital tract, back pain or dysuric disorders. Macroscopically, transitional cell carcinomas reach 3–30 (on average, 12) cm in diameter, grayish-white, 60% of the cases are cystic-solid, 24% are solid, 16% are cystic, 14–41% - bilateral. In contrast to Brenner tumors, calcification of the stroma is uncharacteristic for them. Microscopic examination revealed diffuse, local or non-uniform trabecular structures [3, 4].

The diagnostic standard is ultrasound of the pelvic organs [5] and the CA 125 tumor marker [6], which is of low sensitivity and specificity, and as a whole increases

sensitivity to 89.4% and specificity to 99.8% [7,8], however, it does not affect survival [7,8]. As well as an algorithm taking into account the indicators of two, CA 125 and HE-4 tumor markers (calculation of the ROMA index), in order to determine the risk of malignancy, the sensitivity and specificity of the method also significantly increases [7].

Currently, the use of magnetic resonance imaging (MRI) is considered to be a reliable method for accurately determining the origin of a tumor and the detailed characteristics of its structure, as well as determining the local invasion of a tumor [9,10]. Its advantages are high resolution, the ability to use without the introduction of a contrast agent and the absence of ionizing radiation [11].

In the diagnosis of ovarian lesions without clear signs of benign or malignant MRI has a sensitivity of 76% and a specificity of 97% [12]. In the work of L. Manganaro et al. it was shown that MRI is more effective than computed tomography (CT), when assessing the spatial relationship of the pelvic masses and the differential diagnosis of solid and liquid components [13]. According to A. Tsili et al., the use of MRI in the diagnosis of ovarian tumors is somewhat more effective than CT, however, no statistically significant differences were obtained [14].

Due to the rarity of transitional cell ovarian tumors, the tactics of treating patients with this pathology is not entirely clear.

Ovarian transitional cell carcinomas characterized by good sensitivity to chemotherapy. The standard of treatment is extirpation of the uterus with appendages, removal of the greater omentum, followed by cisplatin-containing chemotherapy. Factors that affect the survival of patients receiving chemotherapy include the clinical stage of the disease, the percentage of transitional cell carcinoma in the primary tumor, and the results of the second-look surgery [2].

In this article, we present a clinical case of a transitional cell tumor of the ovary that was detected during surgical

treatment in a gynecological hospital concerning a pre-benign neoplasm of the ovary. The patient, 23 years old, was admitted with complaints of pulling pain in the lower abdomen, menstrual irregularities in the form of irregular menstruation with delays of up to 2-3 months. The cyst of the right ovary was discovered 2 years ago, repeatedly treated on an outpatient basis with anti-inflammatory, antibacterial and hormonal therapy, without effect. A patient with asthenic physique with a pronounced deficiency of body weight (BMI 15.8). In recent years, weight loss has not been observed. Lack of body weight notes throughout life. Ultrasound of OMT: Ultrasound signs of cystic-modified ovary. MRI : Signs of a multicameral cystic formation of the right ovary (presumably serous - papillary cystadenoma of the right ovary). Oncomarkers CA 125: 21.3 IU / ml, NE - 4: 65.1 pmol / l. In the description of the echo picture and MRI data for the malignant course of the tumor was not, the values of tumor markers are also within the normal range. Preliminary examination by the gynecologic oncologic, the conclusion about the absence of oncopathology was given. Macroscopically, during laparoscopy, cystic formation up to 5 cm in diameter, gray-white, loose structure was detected.

Exfoliated and removed from the abdominal cavity in the endobag. Microscopic description: multi-chamber cyst with the growth of a malignant tumor with papillae, solid growth, lamellar cells of transitional cell carcinoma, nuclear polymorphism, mitotic fission figures and infiltrating growth. Conclusion: Transitional cell carcinoma (CD -O codes 8120/3) of the ovary. The patient is referred for pre-examination and treatment in an oncological institution. In this case, we were faced with the problem of primary screening, at no stage of the survey there was an assumption about the malignancy of the tumor.

Findings. Our literary review of each stage of diagnosis of our clinical case showed that the primary diagnosis of ovarian cancer remains a challenge for oncologists around the world, despite the development of medical technology and quite promising results on the sensitivity and specificity of diagnostic methods. To solve, it is necessary to answer a series of questions about the possibility and feasibility of organizing screening, criterion and quality of interpretation of the picture of instrumental data, as well as interest and thorough training of specialists in the field of visual diagnostics.

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## РЕЗЮМЕ

**КЛИНИЧЕСКИЙ СЛУЧАЙ ПЕРЕХОДНО-КЛЕТОЧНОГО РАКА ЯИЧНИКА КАК ПРОБЛЕМА  
НЕСОВЕРШЕНСТВА СТРАТЕГИИ СКРИНИНГА****А.И. Коркан, М.В. Лактионова**

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Переходно-клеточные опухоли яичника достаточно редкие новообразования и единой тактики лечения данной патологии на сегодняшний день нет. Однако среди гинекологических злокачественных новообразований рак яичников имеет самую высокую летальность. Ввиду отсутствия эффективных скрининговых программ только в 20% случаях удается диагностировать на I и II стадии заболевания. Таким образом, ранняя диагностика является сложной задачей, стоящей перед онкологами во всем мире.

В данной статье представлен клинический случай проблемы первичной диагностики переходно-клеточной карциномы, для разбора, которого мы провели литературный обзор по основным методам диагностики злокачественных новообразований.

**Ключевые слова:** *переходно-клеточная опухоль, магнитно-резонансная томография, онкомаркеры, ультразвуковая диагностика.*

## ТҮЙІНДЕМЕ

**СКРИНИНГТІК СТРАТЕГИЯНЫҢ ЖЕТІЛМЕГЕНДІГІ МӘСЕЛЕСІ РЕТІНДЕ АНАЛЫҚ БЕЗІНІҢ  
ӨТПЕЛІ КЛЕТКАЛЫҚ КАРЦИНОМАСЫНЫҢ КЛИНИКАЛЫҚ ЖАҒДАЙЫ****А.И. Коркан, М.В. Лактионова**

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От қабатының өтпелі жасушалары іс жүзінде сирек кездесетін ісіктер болып табылады және қазіргі уақытта осы патологияның бірде-бір емдеу стратегиясы жоқ. Алайда, гинекологиялық қатерлі ісік ауруларының арасында овариндік қатерлі ісіктің ең жоғары деңгейі бар. Тиімді скринингтік бағдарламалар болмағандықтан, жағдайлардың 20% -ында аурудың I және II сатысында диагностикалауға болады. Осылайша, ерте диагноз бүкіл әлем бойынша онкологтар үшін қиындық тудырады.

Бұл мақалада қатерлі ісіктерді диагностикалаудың негізгі әдістерін әдеби шолуды жүргізген талдауға арналған ауыспалы клеткалық карциноманың алғашқы диагнозы мәселесінің клиникалық жағдайы келтірілген.

**Түйінді сөздер:** *ауыспалы жасуша ісіктері, магниттік-резонанстық көріністер, онкомаркерлер, ультрадыбыстық диагностика.*