

RECURRENCE OF OVARIAN CANCER: POSSIBLE CAUSES, EARLY DETECTION

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ABSTRACT

Relevance: Early detection of ovarian cancer relapses and their treatment is among the most difficult in practical oncogynecology. Early diagnosis of ovarian cancer recurrence increases the effectiveness of treatment and gives a more favorable survival prognosis.

The study aimed to show the possible cause of ovarian cancer recurrence and methods for early detection of relapses.

Materials and methods: We systematically analyzed 31 cases of recurrent ovarian cancer treated at the Zhambyl Regional Center of Oncology and Surgery (Kazakhstan) in 2021-2022. We divided them by age, stage, period of relapse, type of histology, tumor grade, sites of recurrence, and symptoms of recurrence.

Results: Ovarian cancer is most often detected in the late stages since, in the early stages, the disease is asymptomatic. Patients with advanced stages showed more relapses and distant metastases. Most ovarian cancer and this disease's relapses are detected at 50-70 years old. The late stages give more distant and multiple relapses than the early stages and in terms of earlier. Moreover, according to histology results, mesenchymal tumors are more significant than epithelial and G3.

Conclusion: The recurrence of ovarian cancer is an aggressively occurring disease. Based on the analysis work carried out, more than 70% of patients with recurrent ovarian cancer were aged 50-70 years, and the recurrence rate was higher at later stages (St III) or with a low-grade form of the tumor. All patients received platinum-based combination therapy. Targeted therapy (Bevacizumab) was administered in generalization of the process. More than 20% of all patients are resistant to platinum, whose relapse occurred before six months; the rest are sensitive to platinum with a later relapse. Based on everything, there is an increase in distant and multiple relapses in the late stages of ovarian cancer. This indicates the need to introduce screening programs based on cancer markers (CA-125) and diagnostic instrumental examinations (MRI/CT) to detect ovarian cancer in the early stages. After the treatment, all patients with this disease should be under active supervision, especially patients with low-grade tumors and in late stages.

Keywords: ovarian cancer, recurrence of ovarian cancer, prevention.

Introduction: Ovarian cancer is the most commonly diagnosed gynecologic malignancy and the leading cause of cancer-related deaths in women [1, 2]. Ovarian cancer ranks seventh among the eighteen most common oncopathologies in the world. At the same time, ovarian cancer occupies a leading position in the structure of mortality: the first place among deaths from oncogynecological diseases and the fifth place among the mortality of the female population due to oncopathology [3, 4]. One of the main causes of high mortality in ovarian cancer is the diagnosis of primary disease at advanced stages and a high risk of recurrence. According to some researchers, all patients with ovarian cancer die after relapses within three years [5]. Early detection of relapses makes it possible to perform secondary cytoreductive operations in combination with various chemotherapy regimens, which, according to some authors, increases the survival rate of patients up to 47%. [6]. Functional visceral fat activity assessed by 18F-FDG PET/CT is significantly associated with regional lymph node metastasis. Furthermore, it is a helpful factor in predicting such metastasis. Implementation of the study results into medical practice will help practitioners choose tactics and control for patients with recurrent ovarian cancer [7]. Early diagnosis of ovarian cancer recurrence increases the effectiveness of treatment and gives a more favorable survival prognosis.

To date, 354 people with ovarian cancer are registered in the Zhambyl region; 205 (57.9%) are on record for >5 years. Out of 58 women registered in 2022, 17 had stage I, 4 – stage II, 34 – stage III, and 3 – stage IV cancer.

The study aimed to show the possible cause of ovarian cancer recurrence and methods for early diagnosis.

Materials and methods: We systematically analyzed 31 patients with recurrent ovarian cancer treated at the Zhambyl Regional Center of Oncology and Surgery in 2021-2022. We divided them by age, stage, period of relapse, type of histology, tumor grade, sites of recurrence, and symptoms of recurrence.

Results: Out of 31 ovarian cancer recurrences, more than 70% occurred in women aged 50-70 years; 22.6% of patients were below 50, and only 3.2% were above 70 years. By stages, most were stage III-IV cases (58.1%), that is, more advanced; 19.4% were stage I, and 22.5% were stage II (Figure 1).

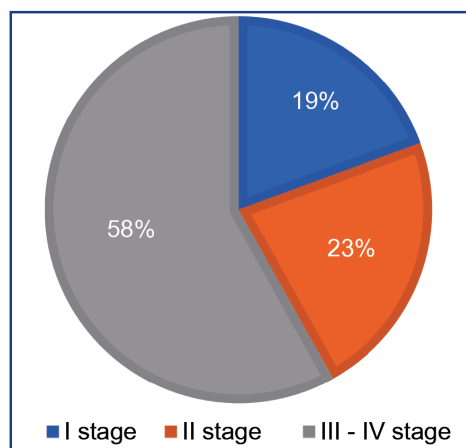


Figure 1 – Percentage of relapses by stage

Based on our data, late stages produce more and earlier relapses than stages I-II.

Figure 2 shows relapse periods by stage. Advanced stages produced earlier relapses than stages I-II. Early stages like stage I did not produce relapses until 6 months.

All patients were operated on and received adjuvant chemotherapy courses. 41.9% of patients (6.5% with stage II and 35.4% with stage III) received neoadjuvant chemotherapy courses.

22.5% of cases were symptomatic. In asymptomatic cases (77.5%), relapses were detected by instrumental laboratory tests.

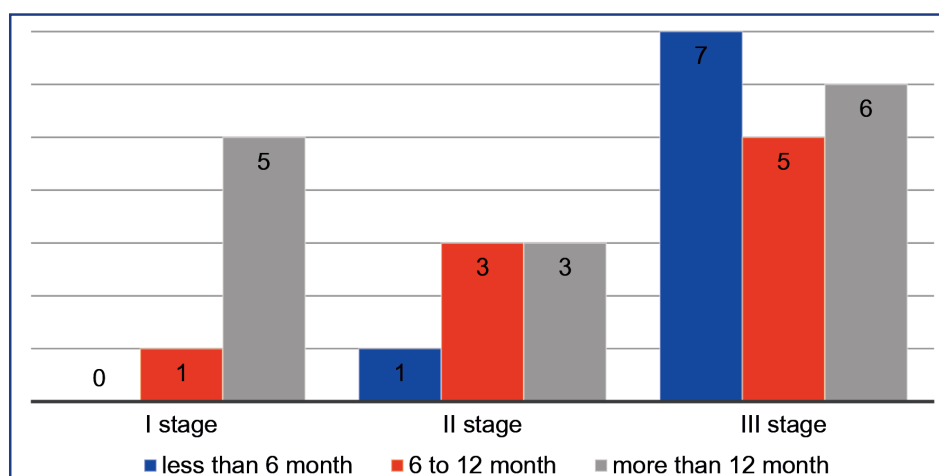


Figure 2 – Relapse periods by stage

51.6% of patients had single relapses; the rest had multiple relapses. Also, the recurrence of ovarian cancer could be local or remote. 74.2% of patients had distant relapses; the relapses were local in other cases.

If we divide by stages, local relapses (in the pelvis) were detected in patients with stage I-II of the disease, and distant relapses were registered with advanced stages.

According to the histological results, the tumors were 77.4% epithelial and 22.6% mesenchymal.

Regarding the tumor differentiation degree, low-grade tumors (G3) were more aggressive (42%) and caused relapses more often than G1 (12.9%) or G2 (29%) tumors. Moreover, in 16.1% of patients, the tumor differentiation degree was not determined because of the neoadjuvant therapy they had received.

Conclusion: The recurrence of ovarian cancer is an aggressively occurring disease. Based on the analysis work carried out, more than 70% of patients with recurrent ovarian cancer were aged 50-70 years, and the recurrence rate was higher at later stages (St III) or with a low-grade form of the tumor. All patients received platinum-based combination therapy. Targeted therapy (Bevacizumab) was administered in generalization of the process. More than 20% of all patients are resistant to platinum, whose relapse occurred before six months; the rest are sensitive to platinum with a later relapse. Low-grade ovarian cancer produces faster relapse, that is, before 6 months, and is more resistant to platinum drugs. Based on everything, there is an increase in distant and multiple relapses in the late stages of ovarian cancer.

Therefore, such patients should be actively monitored by an oncogynecologist and regularly pass cancer markers (CA-125) tests and instrumental diagnostic examinations (MRI/CT) for early detection of ovarian cancer recurrence.

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АНДАТПА

АНАЛЫҚ БЕЗ ҚАТЕРЛІ ІСІГІНІҢ ҚАЙТАЛАНУЫ: МҮМКІН СЕБЕПТЕРІ ЕРТЕ АНЫҚТАУ

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Өзектілігі: аналық без қатерлі ісігінің қайталануын ерте анықтау және емдеу практикалық онкогинекологиядағы ең күрделі болып табылады. Аналық без қатерлі ісігінің қайталануын ерте диагностикалау емдеудің тиімділігін арттырады және өмір сүрудің қолайлы болжамын береді.

Зерттеудің мақсаты – аналық без обырының қайталануының ықтимал себебін және ерте анықтау әдістері.

Материалдар мен әдістері: Біз Жамбыл облыстық онкология және хирургия орталығында 2021-2022 жылдары қайталанған аналық без обыры бар 31 науқасты жүйелі түрде талдадық. Біз оларды жасына, кезеңіне, қайталану кезеңіне, гистология түріне, ісік қатерлі ісігінің дәрежесіне, қайталану орындарына және қайталану белгілеріне қарай бөлдік.

Нәтижелері: аналық без қатерлі ісігі көбінесе кеш сатысында анықталады, өйткені ауру ерте сатысында асимптоматикалық болып табылады. Кеш сатыдағы науқастарда рецидивтер мен алыс метастаздар көп болды. Аналық без қатерлі ісігінің және аурудың қайталануының көпшілігі 50-70 жас аралығында анықталады. Кеш кезеңдер ерте кезеңдерге қарағанда және ертерек кезеңдерге қарағанда ұзақ және бірнеше қайталанулар береді. Сонымен қатар, гистология нәтижелеріне сәйкес, мезенхималық ісіктер эпителий мен G3-ке қарағанда маңыздырақ.

Қорытынды: аналық без қатерлі ісігінің қайталануы-бұл агрессивті ауру. Жүргізілген талдауға сәйкес, қайталанатын аналық без обыры бар науқастардың 70% - дан астамы 50-70 жаста болған және қайталану жиілігі кеш сатыларда (III кезең) немесе ісіктің төмен сараланған түрінде жоғары болған. Барлық пациенттер платина негізіндегі аралас терапия алды. Процесті жалттылау кезінде мақсатты терапия (бевацизумаб) тағайындалды. Барлық пациенттердің 20%-дан астамы алты айға дейін қайталанған платинаға төзімді; қалғандары кейінірек қайталанған платинаға сезімтал. Жоғарыда айтылғандардың барлығына сүйене отырып, аналық без қатерлі ісігінің кеш сатысында ұзақ мерзімді және бірнеше қайталанулардың жоғарылауы байқалады, бұл аналық без обырын ерте сатысында анықтау үшін ісік маркерлеріне негізделген скринингтік бағдарламаларды (CA-125) және аспаптық диагностикалық зерттеулерді (МРТ/КТ) енгізу қажеттілігін көрсетеді. Емдеуден кейін бұл аурумен ауыратын барлық науқастар белсенді бақылауда болуы керек, әсіресе төмен дәрежелі ісіктері бар және дамыған сатыдағы науқастар.

Түйінді сөздер: аналық без обыры, аналық без обырының қайталануы, алдын алу.

АННОТАЦИЯ

РЕЦИДИВ РАКА ЯИЧНИКОВ: ВОЗМОЖНЫЕ ПРИЧИНЫ, РАННЕЕ ВЫЯВЛЕНИЕ

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Актуальность: Раннее выявление рецидивов рака яичников и их лечение являются одними из наиболее сложных в практической онкогинекологии. Ранняя диагностика рецидива рака яичников повышает эффективность лечения и дает более благоприятный прогноз выживаемости.

Цель исследования – показать возможную причину рецидива рака яичников и методы раннего выявления рецидивов.

Материалы и методы: Мы провели систематический анализ данных 31 пациентки с рецидивирующим раком яичников, пролеченных в 2021-2022 годах в Жамбылском областном центре онкологии и хирургии (Казахстан). Мы разделили их по возрасту, стадии, периоду рецидива, местам рецидива и симптомам рецидива, типу гистологии, степени злокачественности опухоли.

Результаты: Рак яичников чаще всего выявляется на поздних стадиях, поскольку на ранних стадиях заболевание протекает бессимптомно. У пациентов с запущенными стадиями наблюдалось больше рецидивов и отдаленных метастазов. Большинство случаев рака яичников и рецидивов этого заболевания выявляются в возрасте 50-70 лет. Поздние стадии дают более отдаленные и множественные рецидивы, чем ранние стадии и с точки зрения более ранних сроков. Более того, согласно результатам гистологии, мезенхимальные опухоли являются более значимыми, чем эпителиальные и G3.

Заключение: Рецидив рака яичников является агрессивно протекающим заболеванием. Согласно проведенному анализу, более 70% пациенток с рецидивирующим раком яичников были в возрасте 50-70 лет, и частота рецидивов была выше на поздних стадиях (III стадия) или при низкодифференцированной форме опухоли. Все пациентки получали комбинированную терапию на основе платины. При генерализации процесса была назначена таргетная терапия (бевацизумаб). Более 20% всех пациенток устойчивы к платине, у которых рецидив произошел до шести месяцев; остальные чувствительны к платине с более поздним рецидивом. Исходя из всего вышесказанного, наблюдается увеличение отдаленных и множественных рецидивов на поздних стадиях рака яичников, что указывает на необходимость внедрения программ скрининга на основе онкомаркеров (CA-125) и инструментальных диагностических обследований (МРТ/КТ) для выявления рака яичников на ранних стадиях. После лечения все пациентки с этим заболеванием должны находиться под активным наблюдением, особенно пациентки с опухолями низкой степени злокачественности и на поздних стадиях.

Ключевые слова: рак яичников, рецидив рака яичников, профилактика.

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