## S. M. Kartashov

# **OVARIAN CANCER**

Medical Academy of Postgraduate Education, Kharkiv, Ukraine

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Медицинская академия последипломного образования, Харьков, Украина

Эпителиальная карцинома яичников является одной из наиболее частых опухолей женской репродуктивной сферы.

Большинство эпителиальных раков яичников диагностируется при II–IV стадии заболевания. Циторедуктивная хирургия — единственное лечение, рекомендуемое пациенткам при II, III и IV стадиях заболевания.

Для лучшего прогноза необходимо стремиться выполнить оптимальную циторедукцию с отсутствием макроскопических метастазов опухоли. Субоптимальный вариант — объем резидуальных опухолевых масс менее 1 см<sup>3</sup>.

Ключевые слова: рак яичников, циторедуктивная операция, химиотерапия.

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Several malignancies arise from the ovary. Epithelial carcinoma of the ovary is one of the most common gynecologic malignancies and the fifth most frequent cause of cancer death in women.

There are various types of epithelial cancers of the ovary. Serous epithelial ovarian cancer is the most common type.

Ovarian neoplasms consist of several histopathologic entities, and treatment depends on the specific tumor type.

The majority of epithelial ovarian cancers are diagnosed at II–IV stage diseases at which cytoreductive operations are applied. For the best prognosis it is necessary to aspire executing an optimum cytoreduction with absence of macroscopical metastases of the tumour.

Cytoreductive surgery is the initial treatment recommendation for patients with clinical stage II, III, or IV of disease. To fully stage the disease and achieve maximal cytoreduction to less than 1 cm residual disease or resection of all visible disease in appropriate circumstances.

Key words: ovarian cancer, cytoreductive operation, chemotherapy.

Ovarian neoplasms consist of several histopathologic entities, and treatment depends on the specific tumor type. Epithelial ovarian cancer comprises most malignant ovarian neoplasms; however, other less-common pathologic subtypes must be considered in treatment guidelines [5].

Several malignancies arise from the ovary. Epithelial carcinoma of the ovary is one of the most common gynecologic malignancies and the fifth most frequent cause of cancer death in women. Ovarian cancers are often familial, and three distinct hereditary patterns have been identified: ovarian cancer alone. ovarian and breast cancers, or ovarian and colon cancers. The most important risk factor for ovarian cancer is a family history of a first-degree relative (e.g., mother, daughter, or sister) with the disease [2]. The highest risk appears in women with two or more first-degree relatives with ovarian cancer. The risk is somewhat less for women with one first-degree and one second-degree relative (grandmother or aunt) with ovarian cancer. Epithelial ovarian cancer means the cancer started in the surface laver covering the ovary. There are various types of epithelial cancers of the ovary. Serous epithelial ovarian cancer is the most common type. Researchers are investigating in clinical trials whether the rarer types need to be treated differently. But at the moment, they are generally treated in a similar way to serous epithelial ovarian cancer. The particular subtype does not make much difference to how the disease behaves or the treatment you will have. Some epithelial ovarian cancers are undifferentiated or unclassifiable. These

tumours have cells undeveloped so much that it is not possible to tell which type of cell the cancer started from [4; 5].

Often patients after ovarian cancer have been diagnosed through surgery or tissue biopsy, and they have already undergone cytoreductive surgery and comprehensive staging procedures. However, referral sometimes occurs after incomplete surgery and staging. The components of surgical staging are listed in the algorithms. Identical workup procedures are recommended for patients with undiagnosed or diagnosed pelvic masses at referral [1].

Cytoreductive surgery is the initial treatment recommendation for patients with clinical stage II, III, or IV. To fully stage the disease and achieve maximal cytoreduction to less than 1 cm residual disease or resection of all



visible disease in appropriate circumstances [1; 6].

A maximal effort should be made to remove all gross disease. On entering the abdomen, aspiration of ascites or peritoneal lavage should be performed for cytologic examinations. For obvious disease beyond the ovaries, cytologic assessment of ascites and/or lavage specimens will not alter stage or management. Total hysterectomy and bilateral salpingo-oophorectomy should be performed. The encapsulated mass should be removed intact [6; 9]. All involved omentum should be removed. Suspicious and/or enlarged nodes should be resected, if possible. Patients with tumor nodules of 2 cm or less outside the pelvis should undergo bilateral pelvic and para-aortic lymph node dissection [1; 8].

In patients with advanced ovarian cancer who have had complete debulking, data indicate that overall survival is increased in those who undergo systematic lymphadenectomy. Patients with low-volume residual disease after surgical cytoreduction for invasive epithelial ovarian or peritoneal cancer are potential candidates for intraperitoneal therapy. In these patients, consideration should be given to placement of an intraperitoneal catheter at initial surgery.

Procedures that may be considered for optimal surgical cytoreduction include radical pelvic dissection, bowel resection, diaphragm or other peritoneal surface stripping, splenectomy, partial or cystectomy, ureteroneocystostom [2; 6]. The therapeutic benefit of neoadjuvant chemotherapy followed by interval cytoreduction remains controversial. It may be considered for patients with bulky stage III to IV disease who are not surgical candidates. Before initiation of chemotherapy, the pathologic diagnosis should be confirmed in this group of patients [2; 3; 8].

The prognosis is poor for patients whose disease progress-

es after 2 consecutive chemotherapy regimens without ever sustaining a clinical refractory, or recurs in less than 6 months (platinum-resistant). Note that progression is typically defined using traditional criteria. Panel members emphasized the importance of clinical trials to identify agents active in this group of patients. Because these patients disease was resistant to the primary induction regimen, retreatment with a platinum compound or paclitaxel is not generally recommended. Although panel members do not recommend retreatment with platinum agents, they recognize that altering the schedule of paclitaxel may produce secondary responses. Before any drug is given in the recurrent setting, clinicians should be familiar with the drug's metabolism and ensure that patients are appropriate candidates for the drug. Clinical judgment must be used when selecting postoperative chemotherapy [10;

For patients with platinum-resistant disease or stages II through IV disease who experience a partial response, options include recurrence therapy, clinical trial, or observation. Patients who experience disease relapse 6 months or more after initial chemotherapy are considered platinum-sensitive. Combination of platinum-based chemotherapy is preferred for first recurrence [3; 10].

Patients with ovarian cancer will often undergo retreatment with multiple courses of recurrence therapy. Caution should be used in patients who undergo multiple sequential courses of chemotherapy, because they may experience excessive toxicity and may not be able to tolerate doses used for first-line recurrence therapy; thus, clinical judgment should be used when selecting doses. Potential ancillary palliative surgical and supportive care procedures for select patients are summarized in the algorithm [7; 8].

Secondary cytoreductive surgery can be considered for patients who experience recurrence after a long disease-free interval (= 6 months). A recent meta-analysis suggests that survival increases for patients with recurrent disease who undergo complete cytoreduction. The duration of the disease-free interval has not been established, although panel members agreed that it should be at least 6 months before surgery be considered [1; 9].

### **REFERENCES**

- 1. *Ultra-radical* (extensive) surgery versus standard surgery for the primary cytoreduction of advanced epithelial ovarian cancer / C. Ang, K. K. Chan, A. Bryant [et al.] // Cochrane Database Syst Rev. 2011 Apr. 13. Vol. 4. P. CD007697.
- 2. Evidence for cancer stem cells contributing to the pathogenesis of ovarian cancer / M. D. Curley, L. A. Garrett, J. O. Schorge [et al.] // Front Biosci. 2011. Vol. 16. P. 368–392.
- 3. The role of neoadjuvant chemotherapy in the management of patients with advanced stage ovarian cancer: survey results from members of the Society of Gynecologic Oncologists / S. B. Dewdney, B. J. Rimel, A. J. Reinhart [et al.] // Gynecol Oncol. 2010. Vol. 119. P. 18–21.
- 4. Surgery by consultant gynecologic oncologists improves survival in patients with ovarian carcinoma / M. J. Engelen, H. E. Kos, P. H. Willemse [et al.]. // Cancer. 2006. Vol. 106. P. 589-598.
- 5. Global cancer statistics / A. Jemal, F. Bray, M. M. Center [et al.] // CA Cancer J Clin. 2011. Vol. 61. P. 69–90.
- 6. *Prognostic* significance of splenectomy as part of initial cytoreductive surgery in ovarian cancer / C. K. Mc-Cann, W. B. Growdon, E. G. Munro [et al.] // Ann. Surg. Oncol. 2011 Oct. Vol. 18 (10). P. 29212–2918.
- 7. Primary debulking surgery versus neoadjuvant chemotherapy in stage IV ovarian cancer / J. A. Rauh-Hain, W. B. Growdon, N. Rodriguez [et al.] // Gynecol Oncol. 2011. Vol. 120. P. S12–S13.
- 8. Beyond tertiary cytoreduction in patients with recurrent epithelial ovarian, fallopian tube, or primary peritoneal cancer / K. K. Shih, D. S. Chi, R. R. Barakat, M. M. Jr. Leitao // Gynecol Oncol. 2010. Vol. 116. P. 364–369.
- 9. *Interval* debulking surgery for advanced epithelial ovarian cancer

- / S. Tangjitgamol, S. Manusirivithaya, M. Laopaiboon, P. Lumbiganon // Cochrane Database Syst Rev. 2010. Vol. 6 (10). P. CD006014.
- 10. Neoadjuvant chemotherapy or primary surgery in stage IIIC or IV ovarian cancer / I. Vergote, C. G. Trope, F. Amant [et al.] // N. Engl. J. Med. 2010. Vol. 363. P. 943–953.
- 11. *Tumor* residual after surgical cytoreduction in prediction of clinical outcome in stage IV epithelial ovarian cancer: a Gynecologic Oncology Group Study / W. E. Winter III, G. L. Maxwell, C. Tian [et al.] // J. Clin. Oncol. 2008. Vol. 26. P. 83–89.

### **REFERENCES**

- 1. Ang C., Chan K.K., Bryant A. et al. Ultra-radical (extensive) surgery versus standard surgery for the primary cytoreduction of advanced epithelial ovarian cancer. *Cochrane Database Syst Rev.* 2011: CD007697.
- 2. Curley M.D, Garrett L.A, Schorge J.O et al. Evidence for cancer stem

- cells contributing to the pathogenesis of ovarian cancer. *Front Biosci.* 2011; 16: 368-92.
- 3. Dewdney S.B., Rimel B.J., Reinhart A.J. et al. The role of neoadjuvant chemotherapy in the management of patients with advanced stage ovarian cancer: survey results from members of the Society of Gynecologic Oncologists. *Gynecol Oncol.* 2010; 119: 18-21.
- 4. Engelen M.J., Kos H.E., Willemse P.H. et al. Surgery by consultant gynecologic oncologists improves survival in patients with ovarian carcinoma. *Cancer* 2006; 106: 589-98.
- 5. Jemal A., Bray F., Center M.M. et al. Global cancer statistics. *CA Cancer J Clin.* 2011; 61: 69-90.
- 6. McCann C.K., Growdon W.B., Munro E.G. et al. Prognostic significance of splenectomy as part of initial cytoreductive surgery in ovarian cancer. *Ann Surg Oncol.* 2011 Mar 22
- 7. Rauh-Hain J.A., Growdon W.B., Rodriguez N. et al. Primary debulking

- surgery versus neoadjuvant chemotherapy in stage IV ovarian cancer. *Gynecol Oncol.* 2011; 120: S12-S13.
- 8. Shih K.K., Chi D.S, Barakat R.R, Leitao M.M.Jr. Beyond tertiary cytoreduction in patients with recurrent epithelial ovarian, fallopian tube, or primary peritoneal cancer. *Gynecol Oncol.* 2010; 116: 364-9.
- 9. Tangjitgamol S., Manusirivithaya S., Laopaiboon M., Lumbiganon P. Interval debulking surgery for advanced epithelial ovarian cancer. *Cochrane Database Syst Rev.* 2010; 6(10): CD006014.
- 10. Vergote I., Trope C.G., Amant F. et al. Neoadjuvant chemotherapy or primary surgery in stage IIIC or IV ovarian cancer. *N Engl J Med.* 2010; 363: 943-53.
- 11. Winter W.E. III, Maxwell G.L., Tian C. et al. Tumor residual after surgical cytoreduction in prediction of clinical outcome in stage IV epithelial ovarian cancer: a Gynecologic Oncology Group Study. *J Clin Oncol.* 2008; 26: 83-9.

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M. D. Kucher, M. Ye. Yarotsky, V. G. Zhegulovich, O. V. Pak

# LAPAROSCOPIC-ASSISTED COLPOPOIESIS USING LARGE BOWEL AUTOGRAFT FOR THE MAYER-ROKITANSKY-KÜSTER-HAUSER SYNDROME SURGICAL TREATMENT

A. A. Bohomolets National Medical University, Kyiv, Ukraine Kyiv-city Clinical Hospital N 18, Kyiv, Ukraine

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М. Д. Кучер, М. Е. Яроцкий, В. Г. Жегулович, О. В. Пак

ЛАПАРОСКОПИЧЕСКИ-АССИСТИРОВАННЫЙ КОЛЬПОПОЭЗ С ИСПОЛЬЗОВАНИЕМ КИШЕЧНОГО АУТОТРАНСПЛАНТАТА В ХИРУРГИЧЕСКОМ ЛЕЧЕНИИ СИНДРОМА МАЙЕРА — РОКИТАНСКОГО — КЮСТЕРА — ХАУСЕРА

Национальный медицинский университет имени А. А. Богомольца, Киев, Украина Городская клиническая больница № 18, Киев, Украина

Цель настоящего исследования — улучшение ближайших и отдаленных результатов лапароскопически-ассистированного кольпопоэза с использованием кишечного аутотрансплантата. В период с 1996 по 2012 гг. нами прооперированы 37 пациенток с вагинальной агенезией (синдром Майера — Рокитанского — Кюстера — Хаусера).

Не наблюдалось ни одного случая конверсионной лапаротомии или значительных послеоперационных осложнений. Послеоперационное гинекологическое исследование демонстрировало хорошую морфологию неовагины. Все пациентки отмечали удовлетворительную половую жизнь.

Ключевые слова: лапароскопически-ассистированный кольпопоэз, кишечный аутотрансплантат.

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M. D. Kucher, M. Ye. Yarotsky, V. G. Zhegulovich, O. V. Pak LAPAROSCOPIC-ASSISTED COLPOPOIESIS USING LARGE BOWEL AUTOGRAFT FOR THE MAYER-ROKITANSKY-KÜSTER-HAUSER SYNDROME SURGICAL TREATMENT

A. A. Bohomolets National Medical University, Kyiv, Ukraine Kyiv-city Clinical Hospital N 18, Kyiv, Ukraine

The purpose of this study is to evaluate short, and long-term results of laparoscopic-assisted colpopoesis, using large bowel autograft for the surgical treatment of 37 patients with vaginal agenesis (Mayer–Rokitansky–Küster–Hauser syndrome), operated between 1996 and 2012.

