Low Grade Serous Ovarian Cancer

WHAT SHOULD I KNOW?

Foundation for Women's Cancer

DESCRIPTION OF THE TUMOR/CANCER TYPE

Low grade serous ovarian cancer (LGSOC) is one of the most uncommon epithelial ovarian cancers, accounting for only 2-5% of all ovarian cancers, and 5-10% of the serous subtype of ovarian cancers. Average age at diagnosis is younger than the more common high grade serous subtype and is estimated to range from 45-55 years old, though it has been reported at younger and more advanced ages as well. Like other epithelial ovarian cancers, 80% of all LGSOCs will have spread to the upper abdomen or lymph nodes at the time of diagnosis. However, this cancer type is often more indolent, meaning they grow more slowly, so survival is often longer than for other epithelial ovarian cancers. LGSOC is relatively less sensitive to platinum-based chemotherapy than high grade serous ovarian cancer. LGSOC can be found alongside, or as progression from, non-invasive serous borderline tumors. Though LGSOC does not appear to be part of the hereditary breast ovarian cancer spectrum of diagnoses or gene mutations, genetic testing is recommended as is in all women with epithelial ovarian cancers.

SIGNS & SYMPTOMS

Women with LGSOC have similar symptoms to those with other ovarian cancers. These can include irregular vaginal bleeding, bloating, early satiety (feeling full after eating only a small amount of food), abdominal or pelvic pain or pressure, change in bowel or bladder habits, and/or nausea and vomiting. Individuals experiencing these symptoms for more than two weeks should see their gynecologist for evaluation. Evaluation should include a thorough medical and family history, a physical exam that includes a pelvic exam, blood tests for tumor markers such as CA125, and a CT scan.

SCREENING

There is no effective screening test for LGSOC or other ovarian cancers at this time.

TREATMENT & FOLLOW-UP

This section is intended to clarify basics and showcase how treatment and follow-up may be different for these rare types of cancer.

Role of Surgery

The goal of surgery is to remove as much of the cancer as possible and to accurately determine the stage of the cancer to guide subsequent treatment. It is generally the first step in treatment of LGSOC. This may be done using a minimally invasive approach like laparoscopy or robotic surgery, or may require a regular incision on the abdomen. If the cancer appears confined to the ovary at the time of surgery, the surgeon will remove the affected ovary and tube as well as the omentum (a layer of tissue that covers abdominal organs; ovarian cancer sometimes spreads to the omentum). The surgeon will also evaluate lymph nodes. For younger individuals in this situation who want to preserve their fertility, fertility-sparing surgery can be considered. For individuals with cancer that has spread beyond the ovaries, a more extensive surgery may be required to remove all visible tumor (called a 'debulking'). This may include not only a hysterectomy (removal of the uterus), fallopian tubes, and both ovaries, but also may include removal of the omentum, lymph nodes, and occasionally removal of part of the bowel depending on location of tumor implants. Because these tumors tend to be less sensitive to the standard chemotherapies used for other types of ovarian cancer, preoperative chemotherapy may not be as effective at reducing disease burden as it is in more common ovarian cancers.

Role of Chemotherapy, Hormonal Therapy, Clinical Trials, and Radiation

Treatment after surgery depends on the stage of the cancer. For patients who have cancer that is limited to the ovary (stage IA – IC3) after comprehensive staging, there are several different treatment options. These include chemotherapy (the use of drugs that kill cancer cells), hormone therapy (the use of medicines to block or lower the amount of hormones in the body to stop or slow down the growth of cancer), or observation.

For patients with more advanced stages of cancer, treatment generally includes chemotherapy usually with paclitaxel and carboplatin, as well as hormonal therapy maintenance (sometimes also called endocrine therapy). Hormonal therapy generally involves estrogen blockers to prevent cancer from growing, usually in the form of an oral pill. Radiation is rarely used in ovarian cancer, and is generally reserved for symptoms that may be related to a specific tumor site and cannot be treated with other therapies.

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Clinical trials play an important role in this cancer type as they offer the opportunity to have access to a medication which is expected to be effective but may not be otherwise available. It is always reasonable to consider clinical trial enrollment, in particular with a rare tumor.

Role of Targeted Therapy

Targeted therapies may be available to patients with LGSOC through clinical trial enrollment. In addition, patients who have recurrent LGSOC, or whose cancer has spread or not responded to initial therapies, may be eligible for targeted therapies. Many low grade serous cancers overexpress specific proteins which may make them more susceptible to targeted therapies such as MEK inhibitors. Other women may receive a medicine called bevacizumab which helps prevent new blood vessel formation that supports tumor growth.

Role of Immunotherapy

Immunotherapy (a treatment that uses the body's immune system to fight cancer) is not currently used in the treatment of LGSOC except through clinical trials.

QUESTIONS YOU SHOULD ASK YOUR CARE TEAM ABOUT YOUR TREATMENT PLAN & FOLLOW-UP CARE

If you are not already being treated by a gynecologic oncologist, consider seeking a second opinion.

For those who have not gone through menopause at the time of diagnosis: Will cancer cause me to go into menopause? Is there anything I can do to reduce the symptoms of menopause? Can I take estrogen?

For those who have not completed child-bearing and would like to preserve their fertility: Are there options for fertility preservation that are safe for me?

What are my different treatment options? How do you decide which treatment is best for me?

How will surgery and treatment affect my hormonal function?

How long will I be in the hospital after surgery? How long is the recovery after surgery? When can I go back to my usual activities at work and around the house?

What is the goal of my treatment? Is it to cure the cancer, or control it?

Are there clinical trials available to treat my cancer?

What side effects should I prepare for during treatment?

What symptoms should I call you about right away; which are OK to wait until my next visit?

How will you know if my treatment is working?

How will cancer treatment affect my sex life?

Will I be able to work during treatment? Can I do my normal activities or should I minimize my contact with other people?

How will I be followed after I complete my treatment?

What symptoms should I watch out for after treatment?

What are the chances my cancer will come back?

How will I know if my cancer comes back?

What will my options be if the cancer comes back?

SGO
Society of Gynecologic Oncology

The Foundation for Women's Cancer (FWC) is a 501(c)3 nonprofit organization dedicated to supporting research, education, and public awareness of gynecologic cancers. The FWC is the official foundation of the Society of Gynecologic Oncology. Learn more at foundationforwomenscancer.org.