

Low grade serous ovarian cancer



Ovacome is a national charity providing support and information to anyone affected by ovarian cancer.

We run a free telephone and email support line and work to raise awareness and give a voice to all those affected by ovarian cancer.

This booklet is part of a series giving clinical information about ovarian cancer.

It gives information about low grade serous ovarian cancer, a rarer form of the disease. It describes what low grade is, how it is diagnosed and treated and gives information on potential new treatments and research.





Low grade serous ovarian cancer

Low grade serous is a form of ovarian cancer that is invasive and grows slowly on surface tissue.

Unlike other more common forms of ovarian cancer its cells are more like normal body cells, but this means it is less likely to respond to chemotherapy.

It is a rarer form of ovarian cancer, usually found in people aged between 40 and 60. But it also affects those in their 20s. 30s, 70s and 80s. There are about 560 cases diagnosed in the UK each year.

Between five and 10 per cent (one in 20 and one in 10) of people thought to have the most common form of ovarian cancer, which is epithelial serous ovarian cancer, are found to have low grade serous ovarian cancer (LGSOC). Up to 20 per cent (one in five) of those diagnosed with advanced, serous borderline tumours go on to develop low grade serous ovarian cancer.

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Signs, symptoms and diagnosis

Low grade serous ovarian cancer has similar signs and symptoms to other forms of the disease; pain, bloating, difficulty eating, and bowel and urinary changes as pelvic and abdominal organs are gradually affected.

It is thought to start in the ovaries or fallopian tubes and is usually at stages 2 to 4 when it is diagnosed, meaning that it has spread away from the fallopian tubes and ovaries into the pelvis and then the abdomen. You can find more information on the stages of ovarian cancer in Ovacome booklets on stage 2, stage 3 and stage 4.

Low grade serous ovarian cancer is diagnosed using clinical examination which may include a pelvic examination, ultrasound, and CT scans. You should be offered a CA125 blood test which can detect a protein in the blood that is a cancer marker.

If you are found to have symptoms and the CA125 test comes back at a level of 35 or above, you should be referred for a scan within two weeks. It is important to know that CA125 levels in those with low grade serous ovarian cancer may be less than the threshold level of 35.

How is low grade serous ovarian cancer treated?

Treatment is usually surgery to remove all visible signs of the cancer. If it is diagnosed when it is still at stage 1, contained in the ovaries, you may only need surgery.

Low grade serous ovarian cancer has similar signs and symptoms to other forms of the disease.

> Photo credit: Bridger Film and Photography

If you have not had your menopause and are diagnosed very early at stage 1a you should be offered fertility-preserving surgery. This means just one ovary is removed. You can find more information in Ovacome booklet Stage 1 ovarian cancer.

Most people with low grade serous ovarian cancer are diagnosed when the cancer has spread. So surgery will usually mean removing the ovaries, fallopian tubes, womb, cervix and omentum (a layer of fatty tissue in the abdomen). The surgeon may also want to see if the cancer has spread to lymph nodes. If the cancer has spread further, more distant organs may need to be removed.

If surgery is not possible straight away, perhaps because you are too ill, you may be offered chemotherapy then surgery followed by further chemotherapy. If surgery is not recommended, you may be treated using other therapies. You may be offered hormone therapies.

Chemotherapy and maintenance therapies

After surgery, low grade cancer that has advanced further than stage 1 is usually treated with chemotherapy, although low grade does not respond to this as fully as other forms of ovarian cancer.

You may be offered the chemotherapy drug carboplatin on its own or in combination with a second chemotherapy drug called paclitaxel. Because low grade serous ovarian cancer is less responsive to chemotherapy, you may be offered Avastin (bevacizumab). This is a targeted therapy that affects the blood supply to cancer cells. It can be used alongside chemotherapy. After your chemotherapy you may be offered medication such as letrozole or anastrazole that reduces the amount of the female hormone oestrogen in your body. This is because oestrogen can encourage the growth of low grade serous ovarian cancer. These drugs can be taken long term as maintenance therapies.

Research has shown that using these hormone therapies after first line chemotherapy can keep the disease controlled for longer.

What if low grade serous ovarian cancer comes back?

Most people diagnosed with low grade serous ovarian cancer experience a recurrence at some point.

It may be possible to treat this with further surgery. If you have had a long period of being cancer-free, if the cancer has come back in just a few places and if you do not have ascites (a build-up of fluid caused by the cancer which can lead to abdominal bloating) then surgery may be an option. After surgery you may be offered hormone therapy.

If you have a recurrence your condition may be managed using chemotherapy including Caelyx and paclitaxel, hormonal therapies and targeted therapies which are drugs that target cancer cells which have specific changes.

Research has also shown that a drug called trametinib, a MEK-inhibitor, can be an effective treatment for low grade serous ovarian cancer. A US/UK trial called GOG281/LOGS involved 260 women with recurrent or progressive cancer. It showed that trametinib reduced disease progression by 52 per cent (52 in 100) compared to other treatments such as letrozole, tamoxifen or chemotherapy.

Treatment with trametinib made it four times more likely that LGSOC would respond to therapy and showed a trend towards overall survival benefits.

In England, trametinib is routinely available as an option for adults with recurrent or progressive low grade serous ovarian cancer, it is off-label so not currently licensed for this use.

This is for people who have received platinum-based chemotherapy previously and have not had treatment with a MEK-inhibitor in the past.

In Scotland trametinib is available for patients with low grade serious ovarian carcinoma after at least one line of platinum-based chemotherapy. In Wales and Northern Ireland access to trametinib can be discussed with your consultant.

The emotional impact

Low grade serous ovarian cancer is a slow growing chronic disease that is rare and can been hard to treat effectively. Those with the disease may experience significant emotional difficulties living with LGSOC, continuing treatments and an uncertain future. Anxiety and distress are understandable responses to this situation.

If this is affecting you, ask your GP or clinical team for support. You can get more information from Ovacome's Living with ovarian cancer information on Coping with anxiety at www.ovacome.org.uk/coping-with-anxiety-booklet . You can also call the Ovacome free support line on 0800 008 7054.

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Research and future treatments

A new trial called RAMP 201 is looking at whether a drug called VS-6766 can be used for people with recurrent LGSOC. This drug is a MEK and RAF inhibitor which means it disrupts processes inside the cancer's cells.

The trial is looking at whether it works better if used alone or if used with a second drug called defactinib.

Laboratory scientists are currently screening panels of drugs in order to find new treatment strategies for LGSOC with the aim of fast-tracking some of these into clinical trials.

We welcome your feedback on this booklet. Please email ovacome@ovacome.org.uk or call 0800 008 7054. If you would like to discuss anything about ovarian cancer, please phone our support line on 0800 008 7054 Monday to Friday between 10am and 5pm. You can also visit our website at www.ovacome.org.uk. This is one of a series of information booklets produced by Ovacome. You can see them here: ovacome.org.uk/information.

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