

ovacome..
ovarian cancer

Low grade serous ovarian cancer



Ovacom 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 grows slowly in the fallopian tubes and ovaries and often also in the peritoneum which is the lining of the abdomen and pelvis. Its growth rate and spread can vary. It can still spread to other organs and recur after initial treatment.

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

Around five per cent (five in 100) of people diagnosed with ovarian cancer are found to have low grade serous ovarian cancer (LGSOC). Some cases arise from serous borderline tumours. There are about 560 cases of LGSOC diagnosed in the UK each year.

Low grade serous ovarian cancer does not develop into high grade serous ovarian cancer except in very rare cases.



Low grade serous ovarian cancer does not develop into high grade serous ovarian cancer apart from in exceptional cases.

Signs, symptoms and diagnosis

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

It is thought to start in the fallopian tubes and is usually at stages 2 to 4 when it is diagnosed. This means it has spread away from the fallopian tubes and into the pelvis and then the abdomen. You can find more information on the stages of ovarian cancer here:

<https://www.ovacome.org.uk/stage-2-booklet>

<https://www.ovacome.org.uk/stage-3-booklet>

<https://www.ovacome.org.uk/stage-4-booklet>

Low grade serous ovarian cancer is diagnosed using a pelvic examination, ultrasound, and CT scans. You should be offered a CA125 blood test which can detect a protein that is a cancer marker, although this is not always significantly raised with low grade serous ovarian cancer.

If you are found to have symptoms and the CA125 test shows a level of 35 or above, you should be referred for a scan. However, CA125 levels in people with low grade serous ovarian cancer may be less than the threshold level of 35, so it is important to discuss further investigation of your symptoms, even when CA125 is below 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 fallopian tubes or ovaries, you may only need surgery.

If you have not had your menopause and are diagnosed very early at stage 1a you could be offered fertility-preserving surgery. This means just one ovary is removed. You can find more information here: <https://www.ovacome.org.uk/stage-1-booklet>

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. Sometimes surgery to the bowel is needed to remove as much of the tumour as possible. If the cancer has spread further, more distant organs may need to be removed.

With other forms of ovarian cancer, chemotherapy can be used to shrink the cancer before surgery so as much as possible can be removed. But this does not work so well for low grade serous ovarian cancer. It may still be used in some situations, especially if bevacizumab (Avastin) can be used as well.

If surgery is not recommended, you may be treated using other therapies. You may be offered hormone therapies which help block the cancer from using oestrogen to grow.

Chemotherapy and maintenance therapies

After surgery, low grade ovarian cancer that has advanced further than stage 1 may be treated with chemotherapy, although low grade does not respond to this as well as other forms of ovarian cancer. Clinical trials in the United States are currently investigating whether giving chemotherapy in this setting is beneficial at all.

You may be offered the chemotherapy drug carboplatin on its own or with a second chemotherapy drug called paclitaxel (Taxol). 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 chemotherapy you may be offered medication such as letrozole or anastrozole 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 therapies after first line chemotherapy can keep the disease controlled for longer. Your oncologist may discuss the use of letrozole or anastrozole without giving chemotherapy first.

Low grade serous ovarian cancer and hormone replacement therapy (HRT)

Guidance published by the British Gynaecological Cancer Society (BGCS) and the British Menopause Society (BMS) states that if you have been diagnosed with low grade serous ovarian cancer at stage 1 you may be able to use HRT.

The guidance states that non-hormonal options should be offered in the first instance to women with stage 1 low grade serous ovarian cancers, but that HRT is not contra-indicated.

You should receive full and thorough information about this and discuss the risks and benefits of HRT in this setting with your oncologist.

HRT is not recommended for women with stage 2, 3 or 4, or recurrent, low grade serous ovarian cancer, as it is hormone sensitive and there is an advantage to oestrogen suppressing treatment.

You can see the guidance here: <https://www.bgcs.org.uk/wp-content/uploads/2024/08/BGCS-BMS-Guidelines-on-Management-of-Menopausal-Symptoms-after-Gynaecological-Cancer.pdf>

What if it 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, it has come back in just a few places, and you do not have ascites (a build-up of fluid caused by the cancer which can lead to abdominal bloating) then more surgery may be an option. After surgery you may be offered hormone therapy if you were not on it already.

Research has also shown that a tablet called trametinib, a MEK-inhibitor, is currently the most effective treatment for low grade serous ovarian cancer that has relapsed.

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 shrink 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, but it can still be accessed by patients.

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 serous ovarian cancer after at least one line of platinum-based chemotherapy. In Wales and Northern Ireland access to trametinib can be discussed with your consultant.

Other treatment options include chemotherapies like paclitaxel (Taxol) and Caelyx (pegylated liposomal doxorubicin). These are more effective if given with bevacizumab (Avastin), although this option is only possible in Scotland and Northern Ireland. It also depends on other patient-related factors, such as whether there is bowel obstruction.

As LGSOC's response to chemotherapy on its own is lower than with other forms of ovarian cancer, clinical trials of new drugs and treatments are worth considering.

The emotional impact

Low grade serous ovarian cancer is a slow growing chronic disease that is rare and can be hard to treat effectively. You 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.

Lorcat was diagnosed with low grade ovarian cancer in May 2024.

When I was diagnosed with ovarian cancer, I was very bewildered as I knew nothing about the disease. I knew it was serious. From the tone of the doctor, I assumed I would not have much longer to live.

A few months later I was told I had low grade serous ovarian cancer, that spread more slowly than high grade but did not respond to chemotherapy.

I'm glad I discovered Ovacome as I've learned so much and I'm grateful to be part of the community. I'm still apprehensive as I don't know whether the cancer will recede further – my next scan will tell me more.

You can get more information here:

<https://www.ovacome.org.uk/coping-with-anxiety-booklet>

You can also call the Ovacome free support line on 0800 008 7054.

Research and future treatment

A new trial called RAMP 301 is looking at whether a drug called Avutometinib when combined with defactinib can be used for people with recurrent LGSOC. Avutometinib is a MEK and RAF inhibitor which means it disrupts processes inside the cancer's cells. Defactinib is a FAK inhibitor which disrupts further processes within the cancer's cells.

Laboratory scientists are currently screening panels of drugs 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.

Reviewed by Professor Charlie Gourley, Honorary Consultant in Medical Oncology, University of Edinburgh.

Disclaimer

Ovacome booklets provide information and support. We make every effort to ensure the accuracy and reliability of the information at the time of publication. The information we give is not a substitute for professional medical care. If you suspect you have cancer, you should consult your doctor as quickly as possible. Ovacome cannot accept any liability for any inaccuracy in linked sources.

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