

# Surgery to reduce the risk of ovarian cancer

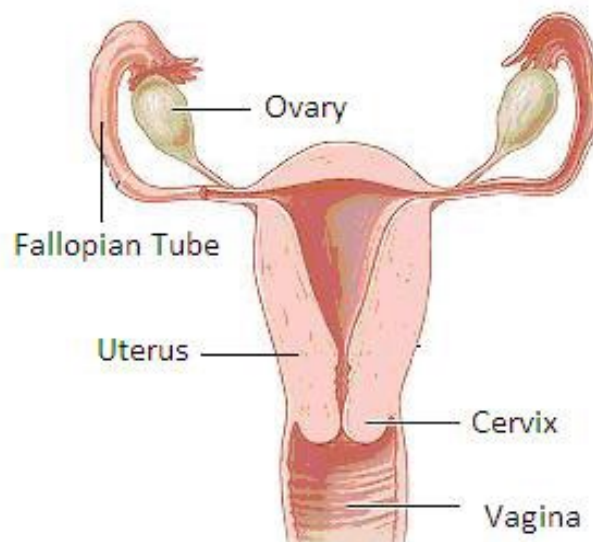
## Information for patients

This leaflet is designed to answer questions you may have about surgery to reduce your risk of ovarian cancer. You may be considering this preventative (prophylactic) surgery if you are considered to be at increased risk of ovarian cancer due to your family history of cancer.

The information in the leaflet describes the short- and long-term implications of having risk-reducing surgery. Being aware of all the available facts will help you make an informed decision about whether this type of surgery is right for you.

The surgery involves removing your ovaries (oophorectomy) and fallopian tubes (salpingectomy). It is called Risk **Reducing Salpingo-Oophorectomy (RRSO)**. We wash the area (peritoneum) with salty water and send this for testing before removing organs to check for any changes in cells.

The aim is to remove the tissue in which ovarian cancer can develop. A diagram of the ovaries and fallopian tubes is shown below.



## Who is suitable for RRSO?

Prophylactic surgery is suitable for:

- People with inherited genetic conditions that increase the risk of breast or ovarian cancer. Some examples are people with a variant (gene change) in the BRCA1, BRCA2, RAD51D, RAD51C or BRIP1 genes.
- People with a strong family history of breast or ovarian cancer but who have not had a genetic test or who do not have a known genetic variant for ovarian cancer.

People considered for surgery should be fit enough to undergo the operation and ideally have a body mass index (BMI) less than 35.

## What are the advantages of undergoing surgery?

- Reduction of ovarian cancer risk by 80-90%. Peritoneal cancer (similar to ovarian cancer) can still occur following surgery
- Possible reduction in breast cancer risk
- Prevention of benign ovarian and tubal disease
- Reduction in anxiety about developing cancer

## What are the disadvantages of undergoing surgery?

- Early menopause, if you have not already gone through menopause. Removal of the ovaries stops the production of ovarian hormones, especially oestrogen. This can result in symptoms of sleep disturbance, night sweats, hot flushes, changes in mood and vaginal dryness. These can be helped by hormone replacement therapy (HRT). Longer term the lack of oestrogen earlier than natural menopause (which is usually about age 51yrs in the UK) can reduce bone density and increase the risk of heart disease and premature death. These risks can be reduced by taking HRT, if appropriate.
- Loss of fertility. It will not be possible to become pregnant once the ovaries and tubes have been removed, which can be upsetting.

There is a small risk of complications associated with having surgery (see page 4).

## Is there a chance that cancer could be found?

When the ovaries and tubes are removed, they are sent to the laboratory for checking and, very occasionally, a cancer is found.

If a cancer was detected, you would be seen quickly by a gynaecological cancer specialist and further treatment discussed.

## Will I need hormone replacement after the surgery?

You may feel anxious about taking hormone replacement therapy (HRT) if you have an increased risk of breast and ovarian cancer. If you are pre-menopausal, taking HRT may reduce the long-term side effects of an early menopause. In pre-menopausal women, use of HRT has not been shown to increase risk of breast cancer. In postmenopausal women, studies have shown that HRT use for over five years slightly increases the risk of breast cancer in

postmenopausal women. *If you have already had breast cancer, you may not be able to take HRT.*

## What does the surgery involve?

RRSO is usually carried out using keyhole surgery (laparoscopy).

This is done under general anaesthetic, and most women go home the same day. A camera is introduced into the abdominal cavity through a 1cm cut at the tummy button. Two further incisions are made on either side of the tummy lower down to allow the surgical instruments to be passed. The ovaries and tubes are excised (cut out) and removed through the same incisions. The wounds may take 2-3 weeks to heal and return to normal activity can take 4-6 weeks. All stitches are dissolvable unless you have been told otherwise. We do not recommend heavy lifting for 6 weeks afterwards to reduce the risk of hernia.

All surgery carries the risk of minor complications. Minor complications include those that have no long-term effects but may delay recovery. Wound infections, bleeding from wound site or vaginally, normal post-operation pain, urine infections and a chesty cough are among the more common examples.

Serious complications that can occur during the operation include damage to the bowel, bladder or a blood vessel. Should this happen during keyhole surgery, the operation may be converted to an open procedure in order to repair any damage. Other such risks include needing a blood transfusion, clots in the legs (deep vein thrombosis or DVT) that may go to the lungs, return to theatre if we are concerned about your recovery, hernias and further treatment if anything comes back from the laboratory after testing (usually results take 4-6weeks).

Some patients may be at higher risk of complications due to obesity or previous operations.

## Is it necessary to remove my womb as well?

A small number of women in the increased genetic risk group have an underlying condition called Lynch syndrome. This condition increases the risk of cancer of the womb (endometrial cancer). Unless you are thought to have Lynch syndrome, the risk of you developing cancer of the womb is **not** high enough to justify removing the womb as a precaution.

Hysterectomy is a more major operation than removal of the ovaries and fallopian tubes and therefore has a higher chance of causing complications. Hysterectomy may be offered if a woman is thought to have Lynch Syndrome, if she takes tamoxifen (which can slightly raise the risk of womb cancer), or if there are symptoms due to benign problems with the womb which can't be treated by simpler means. If you think this may apply to you, please discuss hysterectomy with your surgeon before you come in for surgery.

## Apart from surgery, what else can I do to manage my risk of ovarian cancer?

Ovulation is the production of 'eggs' by the ovaries. It is thought that preventing ovulation offers protection from ovarian cancer. The Combined Oral contraceptive pill (COCP) use, pregnancy or breast feeding can have this effect on ovulation. Research has shown that 5 years of COCP use reduces the risk of developing ovarian cancer by half.

Taking the COCP is often a simple and safe way to try to reduce the risk of ovarian cancer. There may however be a small increased risk of developing breast cancer with the COCP.

If you are known to carry an alteration in your BRCA1 or BRCA2 genes, we would suggest you have a discussion with a specialist if you are considering taking the COCP as a way of managing your ovarian cancer risk.

## Further information

### Macmillan Cancer Support

Tele: 0808 808 00 00

[www.macmillan.org.uk](http://www.macmillan.org.uk)



### Ovacome

Tele: 0207 299 6654

[www.ovacome.org.uk](http://www.ovacome.org.uk)

