

Managing your ovarian cancer risk: Prevention strategies

If you have been told by your doctor that you are at high risk of ovarian cancer, you are probably wondering if there's anything you can do to reduce your risk.

This information sheet tells you about prevention strategies that may reduce your risk. It is based on current scientific evidence. Other sheets in this series tell you about screening methods and lifestyle factors.

This information is for women who are at high risk because they have:

- a strong family history of breast and/or ovarian cancer, and/or
- a change in a gene that normally protects against breast/ovarian cancer (see: gene change).

What are cancer prevention strategies?

Women at **high risk** may develop ovarian cancer. Inheriting a **gene change** that predisposes to ovarian cancer is also **associated with** Fallopian tube cancer and **primary peritoneal cancer**. However, these are less common.

Cancer prevention for ovarian cancer involves surgery to remove organs at risk of cancer.

What types of preventative surgery can be done?

Your doctor may discuss surgery as a way of preventing cancer. The surgery would remove your **Fallopian tubes** and **ovaries** (this is called salpingo-oophorectomy). The **peritoneum** cannot be removed surgically.

The surgery can be done in two ways: **laparoscopy** and **laparotomy**.

Laparoscopy is also known as keyhole surgery. The surgeon makes several small

cuts (1 to 2 cm) in your **abdomen**. Using a telescope-like instrument, the Fallopian tubes and ovaries are removed.

With laparotomy, a larger cut is made in the bikini line, and the Fallopian tubes and ovaries are taken from this one cut.

How do the two types of surgeries compare?

Laparoscopy leaves smaller scars and most women recover more quickly than women who have laparotomy.

Most women can have laparoscopy. However, it is not suitable for some women, such as those who have had surgery or medical conditions that have left scarring in the abdomen.

Choosing your surgery

These are both major operations which may lead to complications and risks.

If you are thinking about surgery, it is important that you talk with an experienced cancer gynaecologist who is familiar with the procedures and the reasons for doing them.

How would surgery reduce my risk of cancer?

Evidence shows that in women at risk for both ovarian and breast cancer, removing the ovaries and Fallopian tubes reduces the risk of ovarian cancer by at least 80%. (The reason the risk does not fall to zero is that rarely, a primary peritoneal cancer may occur, even though a woman has had this surgery. There is presently no way to **screen** for this cancer.)

If a woman has the surgery before menopause:

- the risk of breast cancer is reduced by around half (50%)
- and in women who have already had a breast cancer, the risk of a second breast cancer in the other breast may be reduced by up to 70%.

Would I go through menopause?

Once your ovaries are removed, you won't be able to conceive a baby naturally. You will also go through **menopause**. Your body will still make oestrogen but much less than was made by the ovaries.

Normally, menopause is a gradual process. However, with surgery, it happens straight away. You are more likely to have symptoms than with normal menopause.

Symptoms may include hot flushes, difficulty with sleeping, vaginal dryness, decreased sexual desire, joint and muscle aches, mood changes and bone thinning (osteoporosis). Talk to your doctor about preventing bone thinning, and also about treating other symptoms, if they trouble you.

Can I take Hormone Replacement Therapy? (HRT)

Once the ovaries are removed, a woman no longer has an internal supply of hormones and she goes through menopause straight away. This means you are more likely to have symptoms than women who have normal menopause. No one can predict which symptoms you will have and whether they will be severe.

Hormone Replacement Therapy (HRT) supplies the body with hormones that it no longer produces. HRT is used to control symptoms of menopause.

If you have surgery to remove your ovaries before your natural menopause, you may be able to take HRT to prevent menopause symptoms. The main concern is that it could increase your risk of breast cancer. So far, the evidence suggests that the use of HRT for a period of time after removing your ovaries does not counteract the important reduction in breast cancer risk from the ovarian surgery.

If you have an increased risk of breast cancer and you decide to take HRT, it is important that you see your doctor regularly and use the HRT for as short a time as necessary.

What that word means

abdomen The part of the body below the chest, which contains the stomach, liver, bowel, bladder, uterus, ovaries and kidneys.

associated with This expression is used in science to mean that there is scientific evidence to show that in the presence of one factor (for example, a change in a certain gene), another factor (for example, breast cancer) is more likely to occur.

Fallopian tubes The tubes that carry the ova (eggs) from the ovary to the uterus. Each woman has two Fallopian tubes, one from each ovary.

family history A careful assessment by a Family Cancer Centre of cancer occurrences in a family.

gene change A change somewhere in a gene. A change may be inherited or be caused by an error while a cell is reproducing itself, by factors such as some chemicals or viruses, or by events that science is yet to discover. A change in a gene may lead to disease such as cancer. However, people with a change in a gene that may predispose to cancer don't always get cancer. Also known as a *gene error* or *gene mutation*.

high risk This means that someone's chance of developing a disease in the future is higher than average, due to a family history of the disease and/or a change in a gene known to predispose to that disease. People assessed as at high risk are advised to consider strategies that could reduce their risk.

hormone replacement therapy (HRT) Drug therapy that supplies the body with hormones which it is no longer able to produce; it is used to relieve symptoms of menopause.

laparoscopy An operation, also known as keyhole surgery, in which small cuts are made and instruments inserted and tissue removed through the cuts.

laparotomy An operation in which a long cut is made in the abdomen.

menopause The time in a woman's life when the ovaries stop producing eggs and monthly periods stop. The woman is no longer able to conceive children. Menopause can also be caused by the removal of the ovaries and sometimes chemotherapy.

ovaries Female sex organs that secrete important hormones and contain the ova, which are eggs released at ovulation.

peritoneum The membrane of the abdominal cavity. It lines the abdominal organs such as the bowel and liver.

primary peritoneal cancer Cancer that begins in the peritoneum.

screen / screening Testing all people at risk of developing a certain disease, even if they have no symptoms. For example, all women over the age of 50 are encouraged to have regular mammograms, since all women above this age are at increased risk of breast cancer and mammogram is an effective way to find breast cancer early.

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