



This Information Sheet has been written to provide you with information about cancer of the ovary (ovarian cancer). This Sheet has information about the symptoms, diagnosis, staging, treatment and side effects of ovarian cancer.

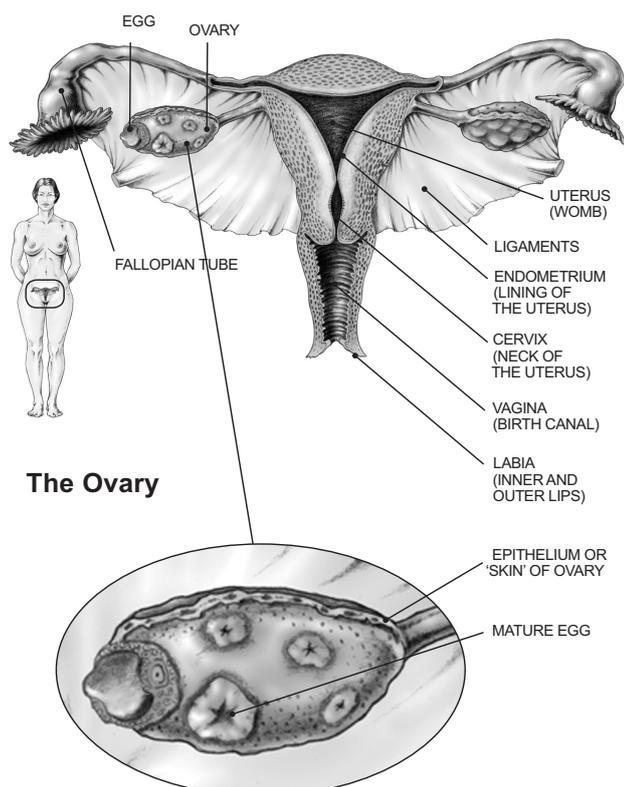
## The ovaries

The ovaries are part of the female reproductive system. They are about the size of almonds, one on each side of the uterus and close to the ends of the fallopian tubes.

The ovaries make the female hormones oestrogen and progesterone. They also produce eggs which travel through the fallopian tubes to the uterus.

When a woman gets older and goes through her 'change of life' menopause the ovaries stop releasing (producing) eggs and make far less hormones.

## The female reproductive system



## Ovarian cancer

There are four main types of ovarian cancer:

1. Epithelial ovarian cancer: this starts in the epithelium (the cells that cover the ovary). Nine out of ten ovarian cancers are epithelial.
2. Germ cell and sex-cord stromal cell ovarian cancers: both these types are uncommon.
3. Sex-cord stromal cell cancers start in the cells that make female hormones. (These can happen at any age.)

Germ cell and sex-cord cancers respond well to treatment. If only one ovary has cancer, it may still be possible for younger women to have children after treatment.

4. Borderline tumours are a group of epithelial tumours which have a lower risk of spreading than other types of tumours.

## Causes of ovarian cancer

The causes of most ovarian cancers are unknown. Some things put women at a higher risk of getting ovarian cancer:

- being Caucasian (white) and living in a western country with a high standard of living
- having no or few pregnancies is a risk. However, taking the contraceptive pill for a number of years seems to keep the risk down. The reason is uncertain but may relate to the number of eggs released (less eggs less risk).
- some types of ovarian cancer may be linked with a family history of cancers of the ovary, bowel, breast and lining of the uterus. A small number of ovarian cancers are caused by inheriting an altered gene from a parent. If there are other people in your family with ovarian, breast, bowel or uterine cancer you should discuss this with your doctor.

## Diagnosis

The early symptoms of ovarian cancer are vague, or there may be no symptoms.

Symptoms can include:

- discomfort in the abdomen or a bloated feeling or pressure
- change in bowel habits, flatulence (wind), indigestion
- kidney or bladder problems
- abnormal vaginal bleeding
- occasionally, pain is the first sign
- the abdomen can become bigger due to a build up of fluid called ascites, which is caused by cancer.
- women can lose weight in spite of having a bigger abdomen.

If ovarian cancer is suspected you will have a number of tests and examinations which may include:

- A physical examination – this will involve an internal pelvic examination
- Blood tests – a test for a tumour marker (CA 125) which are proteins that are often higher than normal in women who have ovarian cancer
- Colonoscopy – an examination of the large bowel using a thin, flexible tube with a light at the end to make sure your symptoms are not due to bowel cancer
- Computerised tomography(CT) scan – a type of X-ray that gives a cross sectional picture of organs and other structures (including any tumours) in your body
- Ultrasound scan
- Positive emission tomography (PET) scan – a low dose radioactive liquid which is used to find abnormalities in the body.

## Staging of ovarian cancer

The tests will show where the cancer is and whether the cancer cells have spread to other parts of the body. This helps your doctor stage the disease so they can work out the best treatment for you.

If the ovarian cancer is confined to the ovaries, it will be called stage 1 or 2. If it has spread to other organs it may be stage 3 or 4. Knowing the stage of the disease helps your doctor discuss treatment choices with you.

## Treatment for ovarian cancer

Treatments for ovarian cancer include surgery, chemotherapy and, sometimes, radiation treatment.

### Surgery

The surgery usually includes the removal of the ovaries, fallopian tubes, uterus, omentum (the apron of fatty, protective tissue covering the abdominal organs), the appendix and some of the lymph nodes in the area. Sometimes, part of the bowel needs to be removed.

Some women may not need extensive surgery. For instance, a young woman with an early epithelial ovarian cancer, germ cell cancer or borderline tumour may not need to have her uterus and both ovaries removed. In this case, it may still be possible for her to have children.

Sometimes it is not possible to remove all the cancer. The more of the cancer that is removed, the better the outlook for the woman. The less cancer there is, the easier it is for chemotherapy to kill off any cancer cells left behind.

### Chemotherapy

The aim of chemotherapy is to destroy all cancer cells while doing the least possible damage to normal cells. The drugs work by stopping cancer cells from growing and reproducing themselves. You will probably have chemotherapy through an intravenous drip. You will have a number of treatments, usually six, every three to four weeks over several months.

### Side effects of chemotherapy

The side effects vary according to the type of drugs used. They may include feeling sick (nausea), vomiting, diarrhoea, constipation, feeling off-colour and tired, and some thinning or loss of hair.

These side effects are temporary. Medications to prevent many of the side effects are available and effective. If you are treated with paclitaxel, you may find that you have joint and muscle pain, rather like flu symptoms for a few days after treatment. Simple pain killers like paracetamol can help. Symptoms usually disappear after a few days

**If fever develops (if your temperature is 38 degrees or over) or you feel unwell, even with a normal temperature, don't wait to see what happens – take action quickly. Contact your cancer doctor or nurse and follow the advice given.**

## Radiation treatment

Radiation treatment (the use of radiation to kill cells) is sometimes used for women with ovarian cancer, especially if it is confined to the pelvic cavity.

## Prognosis

The prognosis (outcome) for women with the less common types of ovarian cancer, for example, borderline tumours or germ cell tumours, is usually very good. For women with the more common epithelial ovarian cancer, it is not so easy to predict the outcome.

Epithelial ovarian cancer can sometimes be cured, especially for those diagnosed at an early stage. Even advanced epithelial cancers usually respond well to initial treatment (at the beginning). There is more chance that the cancer will come back (recur) if it was advanced when a woman was diagnosed.

## Side effects

It may take some time to recover from treatment, the side effects may include:

**Tiredness** – your tiredness may continue for quite a while, even after treatment has finished. Recovery is different for everyone.

**Premature menopause** – if you have had both your ovaries and your uterus removed, you will no longer have your periods and it will not be possible to become pregnant.

If you have not been through menopause, you will experience premature menopause.

**Bowel problems** – it is common to have bowel problems after surgery for ovarian cancer. These can occur for some time after treatment. They may include diarrhoea, cramps or constipation. In particular, it is important not to be constipated.

**Lymphoedema** – lymphoedema is swelling of the body, usually the arms or legs. It may occur after treatment for ovarian cancer if you have had some of the lymph nodes in your pelvis removed. Removal of the nodes may prevent normal draining of the fluid from your legs.

## Palliative care

If the cancer has spread and cannot be cured, your doctor will discuss treating problems caused by the cancer.

Palliative treatment relieves symptoms of illness. It is for people who experience pain and distress associated with cancer. It is an important type of treatment for people with advanced cancer.

## Follow-up care

You will need to have regular check-ups with your specialist. These may include blood tests and physical examinations. Talk with your doctor about how often these may be.

The Cancer Society has other resources you may find useful, such as *Cancer of the Ovaries: A guide for women with cancer, their families and friends, and Sexuality and Cancer/Hokakatanga me te Mate Pukupuku*. You can receive copies of these booklets from your local Cancer Society or by phoning the Cancer Information Helpline **0800 CANCER (226 237)**.

Being diagnosed with cancer can be very distressing. For more information and support phone the Cancer Information Helpline: **0800 CANCER (226 237)**, or contact your local Cancer Society.