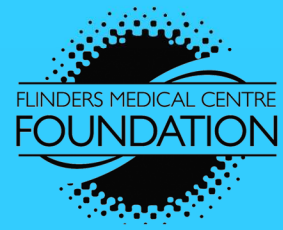


# Information about **Ovarian cancer**



## **WHAT IS OVARIAN CANCER?**

Ovarian cancer is a disease that affects the ovaries. The majority of ovarian cancers are known as epithelial ovarian cancer, where the cells on the surface of the ovary become cancerous. Less regularly the cancer will form in the egg cells within the ovaries or sex cord stromal cells where female hormones are released.

Ovarian cancer is not as common as other gynaecological cancers, but due to a low rate of early stage diagnosis it has become the 6<sup>th</sup> most common cause of cancer death in Australian women.

## **RISKS & STATISTICS**

- Each year around 1200 Australian women are diagnosed with ovarian cancer.
- It is the 9<sup>th</sup> most common diagnosed cancer and the 6<sup>th</sup> most common cause of cancer death in Australian women.
- There is an increased risk of ovarian cancer with age.
- There is also an increase risk of ovarian cancer if a woman has not given birth.
- There are many studies underway around the world that have found trends in different diets and environments, but there is still no conclusive cause.

## **WHAT ARE THE SYMPTOMS?**

Ovarian cancer has often been called the 'silent killer' as most of the symptoms are those that any woman experiences in a normal hormonal cycle.

However studies have shown that most women with ovarian cancer will experience at least one symptom that is out of the ordinary in the year prior to their diagnosis.

These symptoms include:

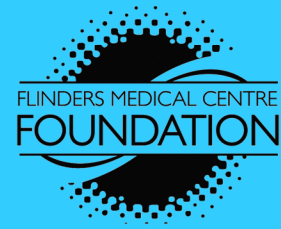
- Bloating of the abdomen
- Feeling full quickly and appetite loss
- Unexplained weight gain or loss
- Pelvic/abdominal pain
- Fatigue
- Back pain
- Change in toilet habits – frequent urination/constipation etc

Women know their bodies best, so any changes that seem abnormal should be reported to a doctor immediately as ovarian cancer is easily treated if caught in the early stages.

## **DIAGNOSIS & TREATMENT**

There is currently no regular screening test to pick up ovarian cancer. Many women may think that pap smears check for ovarian cancer, but unfortunately it only screens for cervical cancer.

# Information about **Ovarian cancer**



As ovarian cancer is difficult to diagnose the most important thing for women to do is be aware of the symptoms related to ovarian cancer and report any unusual and especially persistent changes to their doctors.

If the doctor is concerned a pelvic ultrasound will be undertaken to examine the ovaries and a CA125 blood test may also be undertaken.

CA125 is a protein found in the blood that often has increased levels in ovarian cancer. However this test is not conclusive as about 50% of women with ovarian cancer have normal CA125 levels. Raised CA125 levels can also be found during ovulation, menstruation, in endometriosis and when benign ovarian cysts are evident.

If a diagnosis is made major tumour removal surgery and cancer treatments such as chemotherapy will be undertaken. Current evidence suggests that optimal tumour removal followed by intraperitoneal chemotherapy provides superior survival. Flinders Medical Centre is one of the few centres in Australia to provide this treatment.

Sadly only 25% of ovarian cancer cases are picked up before the cancer spreads and less than one in five women survive five years after treatment.

## **RESEARCH AT FLINDERS**

Dr Scott Grist and his team in the Inherited Cancer Genetics laboratory at Flinders Medical Centre are developing a cost-effective pre-screening laboratory test to better identify individuals who may carry a harmful BRCA1 or BRCA2 gene defect.

The BRCA genes are responsible for repairing DNA damage in a cell. If a defect is inherited in one or both genes there is a 60-80% chance that ovarian or breast cancer will develop as DNA damage accumulates over time.

"Approximately 20% of those screened carry DNA variants that cannot be easily identified as those that cause cancer," said Dr Grist.

"This represents a large group of individuals with an uncertain diagnosis who are not benefiting from the testing and who are put under additional psychological stress."

The current screening method is also quite costly, limiting it to those who know they have a strong family history of ovarian and breast cancer.

Using a technique that screens for DNA damage, this test can measure the rate of DNA repair of a possible BRCA gene defect carrier against the rate of repair from a healthy BRCA gene sample.

This will identify if a full screening of the BRCA genes is required, both saving un-necessary and extensive screening and easing the minds of those who don't know their family's medical history or have an unknown defect in a BRCA gene.