Ovarian cancer

What is ovarian cancer – also known as ovarian carcinoma?

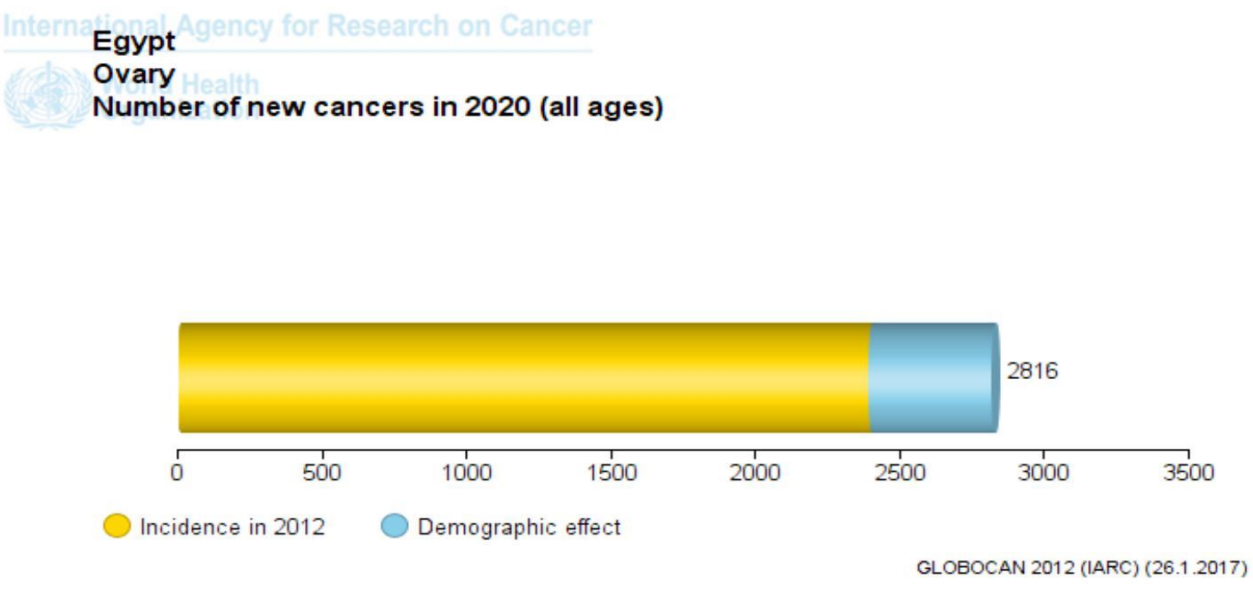
Ovarian cancer develops from the cells of the ovaries. Ovarian cancer is a disease that becomes increasingly common with age. It is one of the most aggressive cancers and the second most common malignant disease of the female reproductive system. It is generally discovered at a very late stage because no symptoms occur for a long time. Clear symptoms often only develop at a late stage of the disease when lower abdominal pain may occur, there is an increase in abdominal girth and digestive problems may develop.

The ovaries contain several types of cell. This means that there are many histological (microscopic tissue) types of ovarian cancer.

Egypt-Ovary cancer

Year	Estimated number of new cancers (all ages)	Male	Female	Both sexes
2012		-	2395	-
	ages < 65	-	1728	-
	ages >= 65	-	667	-
2020		-	2816	-
	ages < 65	-	1935	-
	ages >= 65	-	881	-
Demographic change		-	421	-
	ages < 65	-	207	-
	ages >= 65	-	214	-

GLOBOCAN 2012 (IARC) - 26.1.2017
Population forecasts were extracted from the *United Nations, World Population prospects, the 2012 revision*.
Numbers are computed using age-specific rates and corresponding populations for 10 age-groups.



What are the causes of and risk factors for developing ovarian cancer?

The risk of developing this disease appears to increase with age. Environmental and dietary factors affect the risk of developing ovarian cancer.

In addition, fertility and childlessness probably play a role. On the other hand, pregnancies and use of the contraceptive pill reduce the risk.

Certain gene changes – known as mutations – are known to increase the personal risk of ovarian cancer for a carrier, in the same way as for breast cancer.

What role does lifestyle play in ovarian cancer?

Ovarian cancer is rarely diagnosed in women under the age of 50, but the likelihood of developing cancer of the ovaries increases with advancing age. The younger a woman is when she first becomes pregnant and the more children she has had, the lower her risk of disease. Taking the contraceptive pill for several years has a positive effect and reduces the risk of ovarian cancer.

How is ovarian cancer diagnosed?

Only when the tumour in the ovaries is so large that it exerts pressure on other organs does the patient's condition deteriorate.

Before this point, there are certain warning signs which should lead a woman to consult her doctor immediately, especially if the symptoms have only started recently and are more severe than the normal symptoms of her monthly cycle, and if they do not disappear again after a short time:

- Bleeding between normal periods or after the menopause
- Abdominal pain, bloating or digestive problems with no identifiable cause
- Unexplained weight loss coupled with an increase in abdominal girth

These symptoms can also have harmless causes.

If the tumour has reached a certain size, the gynaecologist will be able to palpate (feel) the malignant change. Various procedures can be used to confirm the diagnosis:

- Physical gynaecological examination (palpation examination) including the lymph nodes in the neck
- Rectal examination
- Ultrasound examination
- Chest x-ray
- Laboratory investigation of the blood and analysis of tumour markers
- Imaging of the bladder and examination of the rectum
- Imaging of the kidneys and ureters
- Rarely: computed tomography (CT) and magnetic resonance imaging (MRI)

Although these investigations underpin the suspected diagnosis, only an operation with histological examination can confirm the diagnosis with certainty.

How is ovarian cancer treated?

Two options are available for treating ovarian cancer:

- Surgery
- Chemotherapy

Surgery
The surgeons perform a laparotomy (abdominal incision) in this operation. Only during the operation itself can the diagnosis be confirmed by taking a sample of tissue for histological examination in the pathology laboratory during the procedure. The pathologist informs the surgeons whether the tissue is indeed ovarian cancer, and if so they will continue with the surgery.

Chemotherapy
After the operation and definitive tissue analysis – known as histology – the doctor and patient discuss the subsequent chemotherapy that is generally required.

Any remaining cancer cells anywhere in the body need to be killed by the chemotherapy. Drugs that inhibit cell growth (cytostatics) are very effective against cells that grow rapidly, a characteristic that is especially typical of cancer cells.

Additional information: ovarian cancer – classification of tumour type and tumour stage

Which stages of the disease are differentiated?

FIGO Stage Ia
The tumour is confined to one ovary.

FIGO Stage Ib
The tumour has affected both ovaries.

FIGO Stage Ic

Situation as in Stage Ia or Ib, plus: ruptured ovary capsule or tumour on the surface of the ovary or malignant cells in the ascites (abdominal fluid).

FIGO Stage IIa

The tumour affects one or both ovaries and has spread to the uterus or fallopian tubes.

FIGO Stage IIb

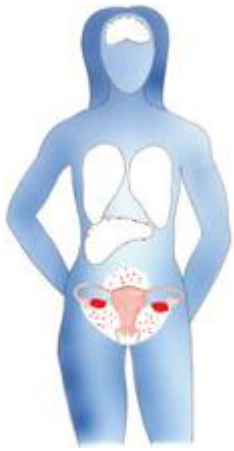
The tumour affects one or both ovaries and has spread to other pelvic tissue.

FIGO Stage IIc

Situation as in Stage IIa or IIb plus malignant cells in the ascites or involvement of neighbouring organs (rectum, bladder)

FIGO Stage III

The tumour affects one or both ovaries and the abdominal peritoneum, or has also spread to the capsule of the liver or to lymph nodes around the major blood vessels (e.g. vena cava, aorta).



FIGO Stage IV

Presence of distant metastases (e.g. in the brain, lymph node involvement in the collarbone region, involvement of the lung tissue and of the pleura with formation of effusion, involvement of liver tissue).

***(FIGO)**

is an international cancer association which created the classification system for tumour staging.