

## Ovarian Cancer

Ovarian cancer is a sort of cancer that begins in the ovaries. The female reproductive system encompasses two ovaries, one on each side of the uterus. The ovaries — each about the size of an almond produce ova as well as the hormones estrogen and progesterone. Ovarian cancer frequently goes unobserved until it has spread within the pelvis and abdomen. At this late stage, ovarian cancer is more challenging to treat. Early-stage ovarian cancer in which the disease is limited to the ovary is likely to be treated successfully. Surgery and chemotherapy are commonly used to treat ovarian cancer.

### Epithelial ovarian tumors

Epithelial ovarian tumors start on the external surface of the ovaries. These tumors can be benign borderline (low malignant potential), or malignant (cancer).

### Benign epithelial ovarian tumors

Epithelial ovarian tumors that are benign don't spread and frequently don't lead to serious illness. There are several kinds of benign epithelial tumors including serous cystadenomas, mucinous cystadenomas and Brenner tumors.

### Borderline Epithelial Tumors

Ovarian epithelial tumors don't evidently appear to be cancerous and are known as borderline epithelial ovarian cancer. The two utmost common types are atypical proliferative serous carcinoma and atypical proliferative mucinous carcinoma. These tumors were earlier called tumors of low malignant potential (LMP tumors). These are dissimilar from typical ovarian cancers because they don't cultivate into the supporting tissue of the ovary (called the ovarian stroma). If they do spread exterior to the ovary, for example, into the abdominal cavity (belly), they might raise on the lining of the abdomen but not into it. Borderline tumors incline to affect younger women than the typical ovarian cancers. These tumors grow gradually and are less life-threatening than utmost ovarian cancers.

### Malignant epithelial ovarian tumors

Cancerous epithelial tumors are termed carcinomas. Around 85% to 90% of malignant ovarian cancers are epithelial ovarian carcinomas. These tumor cells have numerous features that can be used to classify epithelial ovarian carcinomas into different types. The serous type is by far the utmost common and can include high grade and low grade tumors. The other key types include mucinous, endometrioid, and clear cell.

- Serous carcinomas (52%)
- Clear cell carcinoma (6%)

- Mucinous carcinoma (6%)
- Endometrioid carcinoma (10%)

Each ovarian cancer is specified a grade centred on how much the tumor cells look like normal tissue:

- Grade 1 epithelial ovarian carcinomas look more like normal tissue and tend to have a better prognosis (outlook).
- Grade 3 epithelial ovarian carcinomas look less like typical tissue and usually have a worse outlook.

Other traits are also taken into account such as how fast the cancer cells grow and how well they respond to chemotherapy to originate up with the tumor's type:

- Type I tumors tend to cultivate slowly and cause fewer symptoms. These tumors also seem like not to respond well to chemotherapy. Low grade (grade 1) serous carcinoma, clear cell carcinoma, mucinous carcinoma and endometrioid carcinoma are examples of type I tumors.
- Type II tumors grow fast and incline to spread sooner. These tumors incline to respond better to chemotherapy. High grade serous carcinoma is a model of a type II tumor.

### Ovarian germ cell tumors

Germ cells typically form the ova or eggs in females and the sperm in males. Most ovarian germ cell tumors are benign but specific are cancerous and may be life threatening. Fewer than 2% of ovarian cancers are germ cell tumors. Overall, they have a decent outlook with more than 9 out of 10 patients surviving at least 5 years after diagnosis. There are numerous subtypes of germ cell tumors. The utmost common germ cell tumors are teratomas, dysgerminomas, endodermal sinus tumors, and choriocarcinomas. Germ cell tumors can also be a blend of more than a single subtype.

### Endodermal sinus tumor (yolk sac tumor) and choriocarcinoma

These very infrequent tumors typically affect girls and young women. They incline to grow and spread quickly but are usually very sensitive to chemotherapy. Choriocarcinoma that starts in the placenta (during pregnancy) is further common than the kind that starts in the ovary. Placental choriocarcinomas frequently respond better to chemotherapy than ovarian choriocarcinomas do.

### Ovarian stromal tumors

Around 1% of ovarian cancers are ovarian stromal cell tumors.

More than half of stromal tumors are found in women older than 50 but around 5% of stromal tumors occur in young girls. The utmost common symptom of these tumors is abnormal vaginal bleeding. This happens because numerous of these tumors yield female hormones (estrogen). These hormones can cause vaginal bleeding (like a period) to twitch again after menopause. In young girls these tumors can also cause menstrual periods and breast development to happen before puberty. Less often stromal tumors mark male hormones (like testosterone). If male hormones are formed, the tumors can cause normal menstrual periods to halt. They can also mark facial and body hair grow. If the stromal tumor starts to bleed it can cause sudden and severe abdominal pain.

### Ovarian cysts

An ovarian cyst is a assemblage of fluid inside an ovary. Utmost ovarian cysts occur as a usual part of the process of ovulation, these are termed functional cysts. These cysts typically go away within a few months without any treatment. If you grow a cyst, your doctor may want to check it over after your next menstrual cycle to see if it has gotten smaller. An ovarian cyst can be further concerning in a female who isn't ovulating (like a woman after menopause) and the doctor may need to do more tests. The doctor may also order additional tests if the cyst is large or if it does not go away in a few months. Even though most of these cysts are benign, a minor number of them could be cancer. Sometimes the only way to know for sure if the cyst is cancer is to remove with surgery. Cysts that seem to be benign (based on how they look on imaging tests) can be witnessed or removed with surgery. Although there's no way to stop ovarian cysts, regular pelvic examinations help confirm that changes in your ovaries are diagnosed as early as possible.

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