Ovarian Cancer Terms

Ovarian cysts: Cysts are commonly found in or around the human ovary. These may be functional (for example, follicular cysts that contain an egg) and frequently come and go. Most are not cancer. The fluid contained in these cysts often will be absorbed, but cysts may remain in place without any treatment. But if the cyst is large, does not go away on its own in a few months or happens in childhood or after menopause, the doctor may want to do more tests or even perform surgery. This is because a very small number of these cysts can be cancer.

Primary peritoneal carcinoma: These are cancers that appear and behave much like epithelial ovarian cancer but start somewhere else than ovaries. Most likely, these cancers start in the cells that line the surface of the belly (abdominal) cavity, known as the peritoneum and grow. Women who have had their ovaries removed can still get this type of cancer. Symptoms of this cancer are much like those of ovarian cancer. Treatment is also much the same.

Germ cell tumors: These start from the cells that produce the eggs (ova). Most germ cell tumors are not cancer, but some can be. Germ cell tumors are rare and tend to be found in younger women. As a rule, they have a good outlook, with more than nine out of 10 patients surviving at least five years after the tumor is found. There are subtypes of germ cell tumors. The most common are teratoma, dysgerminoma, endodermal sinus tumor and choriocarcinoma. Germ cell tumors also can be a mix of more than one subtype.

LMP tumors: These ovarian cancers have some feature of ovarian cancer under microscopy but do not behave nearly as aggressively. These cancers take a much different course, but are less likely to respond to chemotherapy as well. They tend to affect women at a younger age than other ovarian cancers. They grow and spread slowly and are less life-threatening than most ovarian cancers.

Hysterectomy: Surgical removal of the uterus without removing the tubes and ovaries.

Debugging surgery: Surgical removal of cancer throughout a woman’s body. This procedure plays a critical role in ovarian cancer treatment.

Risk-reducing salpingo-oophorectomy: Surgery performed to remove the fallopian tube and ovaries (and sometimes the uterus) to prevent a woman from developing ovarian cancer.

Intrapерitoneal chemotherapy: Chemotherapy treatments delivered directly to abdominal cavity using an implanted port that can be accessed by doctors and nurses. Commonly used as part of the treatment of ovarian cancer, but can be accompanied by many symptoms and problems.

MicroRNA: Recently discovered small, non-coding RNA transcripts that play a key role in silencing gene expression.

miR-31: A novel tumor suppressor that appears to play a key role in ovarian cancer, garnering national and international recognition. It is the most down-regulated microRNA in epithelial ovarian cancer. This genetic signature correlates with significantly worse outcomes for women with ovarian cancer. Most significantly, restoration of miR-31 levels in ovarian cancer cells results in profound growth arrest and cell death.

Fallopian tube cancer: This is a very rare cancer. It begins in the tube that carries an egg from the ovary to the uterus (called the fallopian tube). Fallopian tube cancer causes symptoms much like those seen in women with ovarian cancer. The treatment and outlook for survival (prognosis) is slightly better than that for ovarian cancer.

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From the American Society for Investigative Pathology (ASIP) meeting, Martin M. Matzuk, MD, PhD, is distinguished to be playing a role in providing the best basic science presentation at the annual meeting of the Society of Gynecologic Oncologists held this past year in San Francisco.
Early detection is the key to fighting ovarian cancer, according to the American Cancer Society. Women today can take control of their own health. Some ways of being proactive in the fight against ovarian cancer are listed below:

**Regular women’s health exams**
During a pelvic exam the doctor will feel the woman's organs to check their size and shape. But most ovarian tumors are hard to find early because the ovaries are deep within the body and the doctor cannot feel them easily. While the Pap test helps to find cervical cancer early, it is not useful for finding ovarian cancer at an early stage.

Early cancers of the ovaries can have symptoms, but these tend to be vague and non-specific. These symptoms might include:
- Swelling of the stomach (abdomen) or bloating
- Pelvic pressure or stomach pain
- Trouble eating or feeling full quickly
- Changes in your bowel habits
- Frequent urination or feeling like you have to go right away

Most of these symptoms are common and can occur for many reasons, most of which are not cancer. However, when these symptoms are caused by ovarian cancer, they tend to progressively worsen, may happen more often or become more noticeable. If you have these symptoms nearly every day for more than a few weeks, talk to your doctor right away.

**Ovarian Cancer Statistics**

The American Cancer Society’s most recent estimates for ovarian cancer in the United States for 2010 are:
- About 21,880 new cases of ovarian cancer
- About 13,850 deaths from ovarian cancer

Ovarian cancer is the ninth most common cancer in women (not counting skin cancer). It ranks fifth as the cause of cancer death in women. Around half of women who are diagnosed with ovarian cancer are 60 or older. It is more common in white women than in African-American women.

A woman’s risk of getting invasive ovarian cancer in her lifetime is about one in 71. Her lifetime chance of dying from invasive ovarian cancer is about one in 95.

**Risk Factors**

Some of the risk factors for the most common type of ovarian cancer (epithelial ovarian cancer) are listed below.

**Age:** Most ovarian cancers happen after change of life (menopause). Half of all these cancers are found in women over the age of 63.

**Obesity:** Obese women seem to have a higher risk of getting ovarian cancer. A study from the American Cancer Society also found a higher rate of death from ovarian cancer in women who were overweight. The risk went up by 50 percent in the heaviest women.

**Having children:** A woman who has had children has a lower risk of ovarian cancer than women who have no children. The risk gets even lower with each pregnancy. Breastfeeding may lower the risk even further. Using birth control pills also lowers the risk of ovarian cancer.

**Female surgery:** Having a tubal ligation may reduce the chance of getting ovarian cancer. Removal of the uterus without removing the ovaries (hysterectomy) also seems to reduce the risk of getting ovarian cancer.

**Fertility drugs:** Some studies have found that use of the fertility drug Clomid® for longer than one year, especially if no pregnancy took place, may increase the risk of LMP tumors. But not having children also increases the risk, even without the use of fertility drugs. Research in this area is now going on. If you are taking this drug, you should talk to your doctor about the possible risks.

**Male hormones:** Androgens are male hormones. Women who took androgens were found to have a higher risk of ovarian cancer.

**Ovarian Cancer Statistics**

**Estradiol replacement therapy and hormone replacement therapy:** Some recent studies suggest women using estrogens after the change of life (menopause) have an increased risk of ovarian cancer. The risk seems to be higher in women taking estrogen alone (without progesterone) for many years (at least five or 10). The increased risk is less certain for women taking both estrogen and progesterone.

**Theories about the Cause**

There are many theories about the causes of ovarian cancer. Ideas typically are based on information from risk factors involving ovarian cancer. For example, pregnancy and taking birth control pills both lower the risk of ovarian cancer. Because both of these reduce the number of times the ovary releases an egg, some researchers believe that there may be a link between the release of eggs and the risk of getting ovarian cancer.

Also, we know that women who have had their tubes tied (tubal ligation) or who have had their uterus removed (a hysterectomy) have a lower risk of ovarian cancer. One theory to explain this is that some cancer-causing substances may enter the body through the vagina and pass through the uterus and fallopian tubes to reach the ovaries. This would explain the effect of removing the uterus or blocking the fallopian tubes on ovarian cancer risk. Another theory is that male hormones (androgens) can cause ovarian cancer.