Ovarian Cancer

Ovarian cancer develops in the ovary and falls into one of four categories: epithelial, stromal, germ cell, and small cell. Epithelial tumors arise from the surface of the ovary and account for about 85 to 90 percent of all ovarian cancers. Nationally, ovarian cancer is the 10th most commonly diagnosed cancer in women and the fifth-leading cause of cancer death in women in 2019. Ovarian cancer is a serious disease, but if caught in its early stages before it spreads, the five-year survival rate is 92 percent, but only 15 percent of diagnoses are made at this localized stage.

Statistics
- In 2019, 22,530 U.S. women are expected to be diagnosed with ovarian cancer, and approximately 13,980 will die.
- Ovarian cancer is the leading cause of gynecologic cancer deaths, accounting for 5 percent of all cancer deaths among U.S. women.
- A woman’s lifetime risk of developing ovarian cancer is 1 in 78.
- In 2019, an estimated 1,752 Texas women will face an ovarian cancer diagnosis, with an estimated 1,018 deaths.
- Between 10 and 15 percent of women with ovarian cancer have a gene, usually BRCA1 or BRCA2, that puts them at high risk for developing the disease. We recommend genetic testing in appropriate family members. There are options for prevention of ovarian cancer in those known to have the presence of these genes.

Risk Factors
- **Family History:** Women with immediate family members (mother, sister, or daughter) who have had ovarian cancer have an increased risk of developing the disease. The risk can originate from the mother’s or father’s side of the family. If you have a family history of cancer, genetic testing can help determine your risk.
- **Age:** Approximately 50 percent of women diagnosed with ovarian cancer are age 63 or older.
- **Parity:** Women who have never given birth or had a first full-term pregnancy after age 35 face a higher risk. Women with a first full-term pregnancy before age 26 have lower risk, which is reduced with each subsequent full-term pregnancy.
- **Breast or Colon Cancer:** Women who have had breast cancer or have a family history of breast or colon cancer face a higher risk of developing ovarian cancer. Some of the inherited genetic disorders that increase a woman’s risk for breast cancer, such as a BRCA1 and BRCA2 gene mutation, also increase the risk of developing ovarian cancer.
- **Medical Conditions:** Women with Cowden disease, Peutz-Jeghers syndrome, Lynch syndrome, pelvic inflammatory disease, Li-Fraumeni syndrome, ataxia-telangiectasia, or MUTYH-associated polyposis have an increased risk of developing the disease.
- **Obesity:** Being overweight may increase the risk of ovarian cancer.
- **Hormone Use:** Women who use estrogen-only hormone therapy after menopause have a higher risk of ovarian cancer.
- **Ethnicity:** Women with Ashkenazi Jewish descent are at a higher risk.

Symptoms
Currently, there is no standard screening test for ovarian cancer, as the Pap test screens only for cervical cancer and some infections. Occasionally pelvic exams detect ovarian cancer, usually once the cancer is at an advanced stage. Therefore, women should be aware of the symptoms for ovarian cancer, as early detection is critical. Women should consult their physician if they persistently experience any of the following symptoms:
- Abdominal swelling with weight loss
- Abnormal bloating
- Fatigue
- Pain in back, abdomen, pelvis, or during sex
- Constipation
- Heavier or irregular menstruation
- Urinary symptoms (urgency or frequency)
- Trouble eating, feeling full quickly, upset stomach

Prevention
Ovarian cancer cannot be prevented in most cases, but women can take steps to decrease risk of developing the disease.
- **Oral contraceptives:** Women who have used birth control pills for more than five years reduce their risk by 50 percent, compared to women who have never taken oral contraceptives.
- **Removal of the fallopian tubes and ovaries:** Studies show that removing the fallopian tubes and the ovaries in premenopausal women with the BRCA1 or BRCA2 genetic mutation can reduce risk of ovarian cancer by 85 to 95 percent and breast cancer by 50 percent.

Treatment Options
Women with ovarian cancer should consult a gynecologic oncologist to determine their specific treatment needs. Treatment for ovarian cancer may include surgery, chemotherapy, radiation therapy, targeted therapy, hormone therapy, or a combination. For younger patients whose cancer has not spread, it may be possible to save the unaffected ovary and fallopian tube to preserve fertility.

Sources: American Cancer Society, American Society of Clinical Oncology, Ovarian Cancer Research Alliance, and Texas Cancer Registry