Ovarian Cancer

Prevalence

In 2017, approximately 22,440 women will be diagnosed with ovarian cancer in the United States.¹ It is the fifth most common cause of cancer death among women in the US, and is expected to cause more than 14,000 deaths this year.^{1,2}

The high mortality rate is mainly because ovarian cancer is often diagnosed at a late stage, by which time the patient has a poor prognosis.³ Despite advances in treatment and diagnosis, for the 60 percent of ovarian cancer patients whose cancer has metastasized by the time of diagnosis, the five-year survival rate is only 29 percent.³ Therefore, there is a real need for additional therapies beyond current standard of care, which is currently, mainly surgery and chemotherapy.⁴

High-grade serous cancer is the most common form of ovarian cancer.⁵ These tumors are believed to start in the cells covering the ovaries though some may form at the Fallopian tubes.^{6,7} Approximately 60 to 80 percent of ovarian cancer diagnoses are of the serous ovarian cancer subtype, which is the most aggressive form of the disease.⁸ As many as 95 percent of stage III–IV ovarian cancers are of the serous subtype.⁹

Risk Factors and BRCA

After being diagnosed with ovarian cancer, the risk of dying from the disease is about 1 in 100.¹⁰ The risk of developing ovarian cancer and subsequent prognosis is influenced by several factors, including age, lifestyle factors and family history.¹⁰ The risk of developing ovarian cancer is increased in women with specific inherited genetic abnormalities.¹⁰ One of these genetic abnormalities include *BRCA* mutations.¹⁰

BRCA gene mutations can play a key role in serous ovarian cancer and can be identified through genetic testing.¹¹ An estimated 15 percent of ovarian cancers are linked to *BRCA* mutations.¹¹ In the general population, 1.3 percent of women will be diagnosed with ovarian cancer, while nearly 39 percent of women who inherit a *BRCA1* mutation and 11 to 17 percent of women who inherit a *BRCA2* mutation will be diagnosed with ovarian cancer in their lifetime.¹¹

Because harmful *BRCA1* and *BRCA2* gene mutations are relatively rare in the general population, experts agree that mutation testing for those who do not have cancer should be performed only when the person's individual or family history suggests the possible presence of the mutation.¹¹

Signs and Symptoms

There is currently no reliable screening method to detect ovarian cancer and symptoms often go unnoticed.¹⁰ Early stages of ovarian cancer often present no specific symptoms.¹⁰ Symptoms of ovarian cancer most commonly manifest as other less serious conditions such as abdominal pain, swelling or bloating, pelvic pressure, urinary symptoms, difficulty eating, feeling full quickly, or early satiety. By the time ovarian cancer is diagnosed, the cancer has often spread beyond the ovaries to nearby organs.¹⁰



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