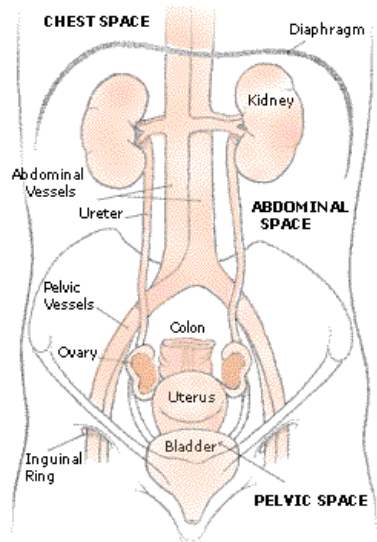


What is Ovarian Cancer?

Ovarian cancer is a malignant tumor (an abnormal, cancerous growth of cells) that can begin in one or both ovaries (female reproductive glands). Like all malignant tumors, ovarian malignant tumors are made up of abnormal cells that can divide and reproduce more rapidly than normal cells, that can invade surrounding tissue, and that can travel to other parts of the body through the blood or lymph vessels (tubes that carry fluid from connective tissues and tissue between organs), where they develop into secondary tumors. The spread of cancer cells is called metastasis.



Types of Ovarian Cancer

Ovarian cancer is a very complex disease. There are more than 30 different types, which are classified according to the type of cell from which they start.

Malignant ovarian tumors can originate from the *surface epithelium* (cells covering or lining the ovaries), *germ cells* (cells that are destined to form eggs), or *sex cord-stromal cells* (cells that secrete hormones and connect the different structures of the ovaries).

Stage and Grade

Determining the stage and grade of malignant ovarian tumors at diagnosis is important in planning treatment. Stage refers to how far the disease has spread. Accurate staging can only be done during a laparotomy (any surgical procedure which involves opening the abdominal cavity) that includes complete surgical staging. During this surgical procedure, the ovarian tumor is removed, abdominal fluid is collected, and biopsy samples for microscopic examination are taken from the diaphragm, the omentum (a fatty, apronlike membrane that hangs down from the stomach and part of the colon in the abdominal cavity), any suspicious nodules in the abdomen, and pelvic and abdominal lymph nodes (small glands that filter out bacteria). Based on this surgical assessment, ovarian cancer can be staged as:

Stage 1 - Ovarian cancer without spread to any pelvic or abdominal organs;

Stage 2 - Ovarian cancer with tumor spread to pelvic organs but without spread to the abdomen;

Stage 3 - Ovarian cancer with tumor spread to abdominal organs; and

Stage 4 - Ovarian cancer spread to the lung, liver, or lymph glands in the neck

The stage of ovarian cancer at diagnosis is also the most important indicator of *prognosis* (prediction of duration, course, and outcome of a disease). Five-year survival rates according to stage as determined by complete surgical staging are 95% for stage 1, 65% for stage 2, 20% for stage 3, and 5% for stage 4.