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## **Cancer Screening for Women**

Cancer remains the second leading cause of death in women. (Heart disease ranks first, as one of every two women will die of a heart attack). In 2008, it is estimated that the four most common diagnosed cancers resulting in death among women will be located in the lung, breast, colon and rectum and the pancreas. The vast majority of these cancer deaths could be avoided through lifestyle changes and early detection.

### **Breast Cancer**

Breast cancer is the leading cancer diagnosed among women. In 2008, an estimated of 182,460 new cases of breast cancer will be diagnosed, and more than 40,480 women will die of the disease and is second to lung cancer as the most common cause of cancer death in the U.S. Women in the United States have a 1 in 8 chance of developing breast cancer by the time they reach their 90's. The single most important factor for surviving breast cancer is the stage at which the disease is detected. The survival rate for early stage disease is 97%. It is 77% for disease, which has spread to the nearby lymph nodes, and 21% for distant metastatic disease.

#### **Mammogram Screening:**

In adolescence, the breast tissue is very dense; however, as women age, the dense breast tissue is infiltrated with fat cells, which allows for greater penetration of the x-rays used in mammograms. Women who have a first-degree relative with breast cancer should have their initial breast mammogram performed at 30 years of age, and then every two years until she is 40. Women without an immediate family history should begin mammogram screening at 35 and then every two years until 40. After 40, the accuracy of the mammogram greatly increases as the amount of fat replacement becomes more significant and mammograms should be performed annually.

#### **Self-Breast Examination:**

Self-breast examinations should be performed on the last day of each menstrual period during the reproductive years. When a woman ceases menstruating, she is recommended to perform the self-exam on the first day of each calendar month. Remember, when performing self-breast exams, you are looking only for a change that you didn't notice on previous self-exams (such as an area of thickening, or a small lump, or tenderness). When you do not find anything new or different, you can trust there is generally nothing to find.

### **Colon Cancer**

Colorectal cancer is the third leading diagnosed cancer with an estimated 71,560 new cases in 2008. It is also the third leading cause of cancer deaths among women, with an estimated 25,700 deaths in 2008. Over 95% of colo-rectal cancers begin as colon polyps. In the absence of family history of the disease, most cases are diagnosed after the age of 50. When the cancer is localized, the 5-year survival rate is 92%; however, the survival rate decreases to 8% for advanced disease. Risk factors that increase a woman's chance of developing colo-rectal cancer include a family history of colo-rectal cancer, family history of adenomatous polyps, personal history of ulcerative colitis, and personal history of breast, uterine, or ovarian cancer.

There are a number of screening methods for detecting colorectal cancer. A rectal exam at the time of a woman's annual evaluation can detect a palpable anal or rectal cancer. Annual stool testing for occult blood has been reported to decrease the mortality of colon cancer by up to 33%. In the absence of a family history of colorectal cancer, a screening colonoscopy should be done at the age of 50, and at the age of 40 with any of the above-mentioned risk factors. When the colonoscopy is normal, it should then be repeated every 5 years.

### **Ovarian Cancer**

Each year approximately 15,000 will die from epithelial ovarian cancer, and is the fifth leading cause of cancer mortality in women. It is estimated that 21,650 new cases will be diagnosed in 2008. The vast majority of women who present with advanced disease will have a 5-year survival rate of only 15-20%. However, women with localized disease at the time of diagnosis will have a 5-year survival rate of 95%. The strongest risk factor of ovarian cancer is a family history of the disease. In the United States, 1 in every 60 women will develop ovarian cancer; however, if a woman has a first-degree relative with the disease (mother, grandmother, sister), her risk is increased five fold; if she has two first-degree relatives, her risk may be as high as 50%.

The problem with early detection of ovarian cancer is the absence of any symptoms or any established effective screening methods. A blood test called a serum CA-125 is a marker with which to follow a patient who has been treated for cancer of the ovary. A pelvic ultrasound, while not specific for diagnosing ovarian cancer, can detect small suspicious abnormalities that may be undetectable on pelvic examination. There is a new blood test (pending FDA approval) that initial studies have demonstrated promise for early detection for ovarian cancer. An annual pelvic and rectal examination is the primary method to detect ovarian cancer. When an enlarged ovary is found in a woman who is regularly menstruating, a follow-up ultrasound exam is required one month later (usually after a menstrual period). Most cysts found in menstruating women are functional cysts (hormone producing) and resolve within a cycle. Any growth in the ovary of a post-menopausal woman is abnormal. A pelvic ultrasound is indicated when an enlarged ovary is persistent or when it is found in a post-menopausal woman. A pelvic ultrasound can determine if the enlargement is cystic or solid or mixed (complex). Cysts that do not resolve or are complex or solid are abnormal and may be cancerous.

### **Endometrial Cancer**

In 2008, cancer of the uterus or endometrium will be diagnosed in approximately 40,100 women, and 7,470 deaths will occur as a result of this disease. The risk in women over the age of 50 and who are not taking estrogen is approximately 1 in 1000 each year of their life. When estrogen replacement is used alone (without a progesterone) the risk increases to 4-5 in 1000. If progesterone is taken with estrogen, the risk remains at 1 in 1000. Since women who are taking ERT are closely monitored by their physician, any endometrial abnormality is usually found before it becomes an actual cancer. If a woman has previously had a hysterectomy, there is no risk. Studies have shown that the use of birth control pills during the reproductive period decreases the risk of endometrial cancer by 50% for up to 15 years after she has discontinued the pill.

Screening for endometrial cancer should be undertaken when a woman develops abnormal uterine bleeding, especially if she is peri-menopausal or older. Usually a pelvic ultrasound is recommended to detect abnormalities within the lining of the uterus (the endometrium). When endometrial cancer is found at an early stage, it is curable.

### **Cervical Cancer**

Cancer of the cervix is essentially a preventable disease. If women have their yearly pap smears and pelvic examinations (after the age of 18 or when they become sexually active), more than 95% of all cancers will be diagnosed at a very early stage when it is curable. A vaccine is now available to prevent over 90% of cervical cancers.