

Cancer of the Cervix: symptoms and treatment

By Asha Murthy MD

Houston: The prevention of cervical cancer by screening Pap smear is one of the greatest success stories of medicine. However, it still remains the second most common cancer in women worldwide, with about 500,000 new cases and 250,000 deaths each year.

Cervical cancer is a tumor of the cervix. The cervix is part of the womb which projects into the vagina. Cancer of the cervix develops in the surface cells, which start to grow in an abnormal way (precancerous cells). After about 10 years, the precancerous cells turn into actual cancer cells, which spread into the cervix, surrounding tissue, and then to the rest of the body.

Epidemiology: There is a wide variation in the number of cervical cancer cases across the globe with higher numbers in developing countries. In India, there are about 150,000 new cases and 75,000 deaths per year, but in the US there are only 12,000 cases and 4,000 deaths per year. This significant decrease in the cases and deaths in the United States is because of routine use of Pap smears, early diagnosis and proper treatment.

Risk Factors: Infection with HPV (human papilloma virus) is central to the development of cervical cancer. HPV is a common virus that spreads through sexual activity. The two most common strains involved are HPV 16 and 18, but about 15 strains are known to be causative. Other risk factors for cervical cancer include having sex



at an early age, multiple sexual partners, smoking, immunosuppression, low socioeconomic status, prolonged use of oral contraceptives.

Symptoms: Precancerous cells and early cancer in the cervix do not cause symptoms. As the cancer grows common symptoms include, bleeding after intercourse, bleeding between periods, a pink, brown, bloody or foul-smelling vaginal discharge, or any bleeding after menopause. Later, there is pain as the cancer starts to grow into surrounding tissues.

Screening: Pap smear detects precancerous cells in a cervical smear. This pre-cancerous condition is 100% treatable. That is why it is so important for women to get regular Pap smears. It is done by inserting a speculum into the vagina and removing cells, from the lining of the cervix, using a cotton swab or a spatula. The cells are then smeared on a glass slide and sent for microscopic examination.

Guidelines from the American College of Obstetrics and Gynecology, recommend that women begin Pap test screening at age 21 and be screened every 2 years. Women 30 years

and older may be screened every 3 years as long as their last three test results have been normal. At the age of 65, women with no abnormal Pap tests in the last 10 years may stop having the tests, after talking with their doctor.

Vaccination/Prevention:

There are 2 types of vaccines now approved by the US Food and Drug administration against HPV infection. Gardasil (produced by Merck, a quadrivalent HPV vaccine, targets 4 different strains of HPV) and Cervarix (produced by GSK, a bivalent vaccine, targets 2 strains of HPV). The vaccine appears to prevent early-stage cervical cancer and precancerous lesions. It is most effective (about 95% against the targeted strains of HPV) if it is given before a person becomes sexually active. The vaccine is approved for use in 10-25 year old females given as 3 shots over 6 months. Women who have been vaccinated still need to have Pap tests.

Practicing safe sex (using condoms) also reduces the risk of HPV and other sexually-transmitted diseases. To further reduce the risk of cervical cancer, women should limit their

number of sexual partners.

Treatment: If precancerous cells are seen in a cervical smear, the Pap smear is said to be abnormal. Further testing and treatment is done by colposcopy, cryotherapy (freezing abnormal cells), laser therapy (using light and heat to destroy cells) or by removing them (conization). Pre-cancer is completely curable when followed up and treated properly.

The precancerous cells if left untreated may result in cervical cancer. Treatment at that point, is more extensive and usually involves surgery, radiotherapy and combined chemoradiation depending on the stage of the disease.

The survival outcome is about 80-90% for earlier stages but only 40-50% for late stage.

Most women who are diagnosed with cervical cancer today have not had regular Pap smears or they have not followed up on abnormal results. We hope this article brings the required awareness about this life threatening disease, which can be prevented by behavior modification, regular screening by Pap smear and vaccination.

(As an Indian American community organization, the Indian American Cancer Network (IACAN) is committed to provide proper health education and create awareness about early cancer diagnosis by promoting early cancer screening and seeking prompt treatment. Watch for our next educational seminar on March 13, 2011. For more information visit www.iacanetwork.org or call 713-370-3489.)