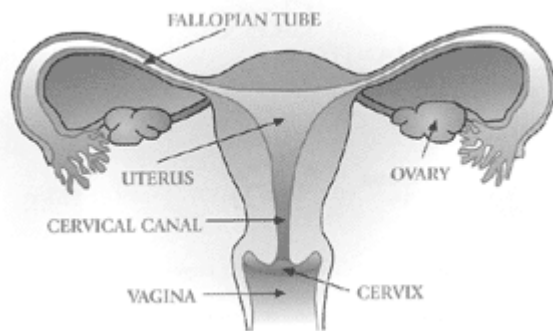


Cervical Dysplasia

What Is Cervical Dysplasia?

A precancerous condition called dysplasia of the cervix, detectable by a PAP test is on the rise among women in their late teens and early twenties. Dysplasia, which literally means "disordered growth", is easily treated and rarely recurs if caught early. But left untreated, approximately 30% of moderate or severe cases eventually develop into cervical cancer, usually when a woman is in her thirties or forties. In 1990 approximately 13,500 women in the U.S. were diagnosed with cervical cancer; about 6000 died of it.



Dysplasia is a condition in which the cells of the cervix (the narrow canal that links the lower part of the uterus with the vagina) change in either size or shape. The medical term for dysplasia is cervical intra-epithelial neoplasia (CIN). CIN-I is a mild cell abnormality that will, in some cases, regress without treatment. CIN-II is a more extensive abnormality, and CIN-III carcinoma-in-situ (confined to the site of origin). Considered a precancerous condition, CIN-III is virtually 100% curable. If CIN-III lesions are not treated, invasive cancer - into the cervix - can develop from six months to ten or fifteen years later. This is the stage when most women first notice symptoms, such as unusual bleeding. It is also when most deaths occur.

How Common Is Dysplasia and What Causes It?

According to an American College Health Association study, one in ten college women is infected with HPV - the human papillomavirus - one of the country's fastest growing sexually transmitted diseases (STD's). Several of HPV's many different strains cause genital warts or lesions that have been linked to both dysplasia and cancer. Most experts now believe the increase of dysplasia in young women is probably due to HPV and that **over 90%** of cervical cancers are related to HPV infection. (For more on HPV see booklet [HPV Infection and Disease](#) available at Student Health).

Having sex before age 18 or having more than three sexual partners in a lifetime increases a women's likelihood of contracting HPV and cervical cancer. Smoking has also been linked to increased risk for cervical cancer. Researchers believe that nicotine triggers cell changes in the cervix similar to those it effects in the lungs, since both organs are covered by squamous (scaly) cells.

How Is Dysplasia Detected?

The PAP smear - quick painless test that involves collecting a small number of cervical cells and examining them for abnormalities - may be a woman's best protection against cervical cancer as early diagnosis and treatment is the key to survival with any cancer. Even the PAP test is far from perfect, however. It has a high rate of false negatives (10% to 15%) and it is possible for a woman with dysplasia to have a normal PAP result. Despite the PAP's imperfections, the screening test has helped to cut the death rate for cervical cancer by 60% in the past 30 years. Sexually active women are urged to get a PAP test every year.

An abnormal PAP could indicate an infection, like vaginitis or HPV, or it could indicate cellular changes. If cellular changes have occurred, the lab will indicate whether the squamous intraepithelial lesion (SIL) is high or low grade. A low grade SIL includes HPV infections and cervical intraepithelial neoplasm (CIN) - I, or mild dysplasia. A high-grade SIL



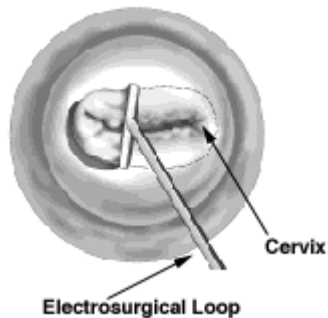
signals CIN II and III or moderate and severe dysplasia.

If a PAP smear indicates a SIL, usually a colposcopy is performed. A colposcopy is an exam of the cervix using a special magnifier to visually examine the cells. The exam is painless and takes approximately 20-30 minutes. Sometimes a biopsy is performed. This is the removal of small pieces of tissue from the cervix that are then examined under a microscope by a pathologist. Most women experience discomfort during a biopsy and light bleeding afterward.

What Is the Treatment?

When the diagnosis is dysplasia, the most common treatment is cryosurgery which kills abnormal cells by freezing them. This procedure is performed in a gynecologist's office and takes less than 10 minutes. Most women have some cramping during the procedure and a watery discharge for several days or weeks afterward.

Laser surgery, which vaporizes or heats away the diseased tissue, is another option. It is often the treatment of choice in the case of more advanced lesions. Women may experience a burning sensation during this in-office procedure which is usually performed under a local anesthesia.



For advanced lesions, repeat abnormalities, or lesions that can't be adequately seen by a colposcope, doctors perform conizations, which are surgical or laser removals of a cone-shaped section of the cervix.

Although none of these treatments compromise a woman's fertility, extensive conization can make it difficult for a woman to bring a pregnancy to term.

Once treated, dysplasia usually doesn't recur. Follow-up PAP smears with or without colposcopy are usually recommended at regular, more frequent intervals for several years after treatment.

Many gynecologists recommend that partners of women treated for HPV infection or dysplasia see a doctor as well. It is estimated that 60% of the partners of women with HPV also have lesions. Risk of cancer in men is uncertain as penile cancer develops at a later age but early detection is crucial.