Cervical Condition

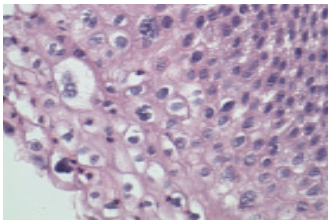
Cervical Dysplasia

What is cervical dysplasia?

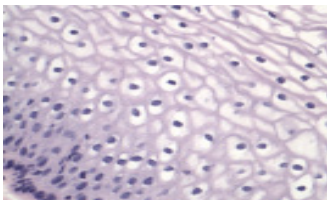
Cervical dysplasia is abnormal cell growth on the surface lining of the cervix. With proper follow-up and treatment, the prognosis for cervical dysplasia is excellent. If untreated, cervical dysplasia may, in some cases, progress to cervical cancer; this process usually takes many years.

The terms squamous intraepithelial lesion (SIL) and cervical intraepithelial neoplasia (CIN) are sometimes used synonymously with cervical dysplasia. Cervical dysplasia can be classifiedinto low-grade (including mild dysplasia, CIN 1, and LSIL) and high-grade (including moderate dysplasia, severe dysplasia, carcinoma in situ, CIN 2, CIN 3, and HSIL).

Most cases of low-grade cervical dysplasia will go away without treatment. However, a small percentage of women with low-grade dysplasia will later develop high-grade dysplasia and/or cervical cancer. Although high-grade dysplasia will sometimes resolve without treatment, a significant percentage will, if untreated, eventually progress to cervical cancer. Again, this process usually takes many years. Because of this risk of progression, cervical dysplasia is sometimes called "pre-cancer." It is important for all women who are diagnosed with cervical dysplasia to continue follow-up with their health care provider to ensure proper monitoring and treatment. With proper monitoring and treatment, very few women with cervical dysplasia will develop cervical cancer.



Cervical dysplasia.



Normal cervical cells.

Who is most likely to have cervical dysplasia?

Although cervical dysplasia is most common in women younger than age 30, it can occur at any age after the onset of sexual activity. Low-grade cervical dysplasia is caused by infection with human papillomavirus (HPV), a common viral infection transmitted by sexual contact. The most important risk factor for high-grade cervical dysplasia is persistent HPV infection. Other risk factors include early age of onset of sexual activity and multiple sexual partners. In addition, factors that weaken the body's immune system–such as cigarette smoking, HIV/AIDS, or immunosuppressing drugs such as those used to treat organ transplant patients– increase the risk of having persistent HPV infection and cervical dysplasia.

Having regular Pap tests is an important first step in detecting cervical dysplasia. omen who have never had a Pap test or who do not have them regularly may develop undetected (and untreated) high-grade dysplasia and cervical cancer. For this reason, women who have limited access to Pap tests and other medical care have higher rates of cervical dysplasia and cancer.

What characterizes cervical dysplasia?

Cervical dysplasia usually doesn't cause any symptoms. It is usually first detected by a routine screening Pap test. In some patients, other infections accompanying cervical dysplasia may cause symptoms.

How does a pathologist diagnose cervical squamous cell carcinoma?

Cervical dysplasia is usually first detected by a routine screening Pap test. In this procedure,the patient's physician or other health care provider collects cells from the cervix and/or vagina, smears them onto a glass slide or places them into a liquid fixative, and then sends the specimen to a laboratory. In the pathology laboratory, slides containing the cells are initially examined under a microscope by a cytotechnologist, a laboratory technologist specially trained in the microscopic examination of cells. The cytotechnologist screens the slides for the presence of abnormal cells. If the cytotechnologist finds abnormal cells in this initial slide screening, then a pathologist will also examine the specimen microscopically for precise classification of the abnormality. Sometimes precise classification is not possible, and the Pap test may be interpreted as atypical or atypical squamous cells of undetermined significanc(ASC-US).

An additional test for human papillomavirus (HPV) infection may be performed in the pathology laboratory. This test may be helpful because most cases of cervical dysplasia are associated with HPV infection, and high-grade dysplasia and cervical cancer are usually associated with certain types of high-risk HPV (including types 16, 18, and other high-risk types).

After an abnormal Pap test, the patient is usually referred for a colposcopy (a magnifiedexamination of the cervix) with additional sampling of the cervix (cervical or endocervical biopsy) if needed. This may be done to confirm the Pap test finding or to rule out a more serious lesion. High-grade dysplasia is usually treated by a cervical loop electrosurgical excision procedure (LEEP) or cone biopsy (another type of excision using a scalpel or laser) to completely remove the abnormal area on the cervix. Cervical or endocervical biopsies and cervical LEEP and cone biopsy specimens are sent to a pathologist for microscopic examination in order to identify the abnormality, give a diagnosis, and determine the extent of cervical involvement. This information helps your health care provider determine whether additional treatment or close follow-up is needed.

For more information, go to www.nlm.nih.gov (U.S. Library of Medicine/National Institutes of Health). Type the keywords cervical dysplasia into the search box.

Definitions

Carcinoma in situ:
Severe dysplasia resembling cervical cancer except that it has not invaded the tissue beneath the surface lining of the cervix.

Cervix:
The part of the uterus that connects the uterus body (where the fetus grows) to the vagina (birth canal).

Invasive:
Spreading into adjacent tissue.

Malignant:
Cancerous; capable of invading into surrounding tissue and/or spreading (metastasizing) to other parts of the body.

Pathologist:
A physician who examines tissues and fluids to diagnose disease in order to assist in making treatment decisions.

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