The Abnormal Pap Smear: Cervical Dysplasia

What is cervical dysplasia?

Cervical dysplasia is the medical term describing abnormal growth of cells in the cervix. The cervix is the lower part of the uterus that opens into the vagina. The uterus is the womb, where menstrual blood is made and where babies grow during pregnancy.

Dysplasia is not cancer, but the abnormal cells may become cancerous over a period of time. Cervical dysplasia may occur at any age after the onset of sexual activity, but is most common between the ages of 25 and 35.

The most common type of dysplasia is called mild dysplasia or “low grade”. This abnormality cures itself about 70% of the time. Moderate dysplasia or moderate “high grade” changes in the cervix are more serious. Your doctor may decide to wait and watch or may feel these cells should be removed. Severe dysplasia (severe high grade) cells on the cervix are considered precancerous and should always be removed.

How does dysplasia occur?

Cervical dysplasia is caused by exposure to Human Papilloma Virus (HPV). HPV is a sexually transmitted disease. While a few forms of HPV may cause genital warts, most have no symptoms. Men may carry HPV but there is no routinely performed diagnostic test for men. Women who have unprotected sex, begin having sex prior to age 18 or have had many sex partners are likely to be exposed to HPV.

Every year, 250,000 to 1,000,000 women in the US are diagnosed with cervical dysplasia. In the majority of these women, the symptoms go away by themselves. In a small percentage, the changes in the cervical cells continue progressing toward cervical cancer. For this reason, it is very important to follow your doctor/nurse midwife/nurse practitioner’s instructions re follow up exams.

Medical research has shown that 80-90% of women with cervical cancer have HPV, but very few women with HPV actually develop cancer. It is felt that HPV is a “cofactor” for cancer, meaning that it is one cause but needs other conditions to make it strong enough to cause cancerous changes in the cervix. Chief among these is smoking. Most female smokers are not aware that nicotine from cigarettes can be found in the cervical cells. Other cofactors include having another sexually transmitted disease (STD) or multiple sex partners. Poor nutrition, particularly a diet low in folic acid (found in fruits and vegetables) can also increase the risk of cervical cancer. Other risk factors include having a partner whose previous partner had cervical cancer and having a history of one or more STDs such as genital herpes.

What are the symptoms?

Although some forms of cervical dysplasia cause genital warts, in general there are few symptoms. Moderate or severe dysplasia may cause bleeding during or after sex. However, the majority of people with HPV have no way of knowing they are infected.
How is cervical dysplasia diagnosed?

The diagnostic tool for cervical dysplasia is the Pap smear. When your doctor or nurse midwife/nurse practitioner collects a pap smear, cells from the cervix are sent to a lab to be viewed under a microscope.

If your pap smear comes back as abnormal, your doctor or nurse midwife/nurse practitioner will arrange for you to have a colposcopy. For this procedure a colposcope (a special instrument similar to binoculars which allows a very close look at the cervical cells) is used to look closely at the cervix. During the colposcopy, cells may be collected from inside the cervix and biopsies (small pinches of tissue) may be taken of any abnormal appearing cells.

How is it treated?

Mild cervical dysplasia often goes away without treatment within six months. If you have mild dysplasia, you will have a colposcopy. You will then have a pap smear in 6 months and again in a year. If your pap is still abnormal in one year, you will need another colposcopy.

If your biopsies show that you have moderate to severe high grade dysplasia, a doctor in the Dysplasia Clinic may freeze, burn, or use a laser to remove or destroy the abnormal tissue. The abnormal tissue can also be removed with a thin wire loop attached to an electrical unit. This is called the loop electrosurgical excisional procedure (LEEP).

Very few women have trouble getting pregnant or have miscarriages after any of these treatments, including cone biopsies. If you become pregnant and have had a cone biopsy, tell your prenatal care provider about it. Most women who have had a cone biopsy are able to become pregnant and carry the baby to term without problems.

Whether you have mild, moderate, or severe dysplasia, it is very important to have it checked to make sure it doesn’t become cervical cancer.

It is very important to have dysplasia treated to help stop it from becoming cervical cancer. The specific treatment may depend on whether the dysplasia is mild, moderate, or severe.

Mild cervical dysplasia, also called CIN 1, often goes away without treatment. If you have mild dysplasia, you should have another Pap smear in 4 to 6 months. If the Pap smear still shows mild dysplasia, your health care provider may recommend colposcopy.
If you have moderate dysplasia, called CIN 2, your provider may freeze, burn, or use a laser to destroy the abnormal tissue. The abnormal tissue can also be removed with a thin wire loop attached to an electrical unit. This is called the loop electrosurgical excisional procedure (LEEP). You do not have to stay in the hospital for any of these procedures. They can be done in your provider’s office.

For severe dysplasia that extends up into the cervical canal, called CIN 3, your doctor may do a cone biopsy, which is the removal of a cone-shaped piece of the cervix or a LEEP. The layer of the cervix which is removed is sent to laboratory to check for cancer and to be sure all abnormal cells were removed.

**How can I take care of myself?**

After a Pap smear that shows cervical dysplasia, you will be referred for a colposcopy. Follow your doctor/nurse midwife/nurse practitioner’s advice for treatment and checkups and be sure to keep your follow-up appointments. This will allow your healthcare provider to detect any recurrence of the dysplasia and treat it promptly.

To lower your risk of cervical dysplasia:

- Practice safe sex by using condoms or don’t have sex.
- If you are having sex, limit your number or partners
- Avoid sexual intercourse until you are 18 or older
- Don’t smoke and avoid second hand smoke
- Do not have sex, or practice safe sex by using latex or polyurethane condoms.
- Try to eat foods that contain folic acid including black-eyed peas, chickpeas, chicken liver, oranges, brewer’s yeast, and spinach.

**Can I still get pregnant if I have Dysplasia?**

Having cervical dysplasia should not make it more difficult to become pregnant. Because of the changes in the immune system during pregnancy, your Pap smear results may be diagnosed as more abnormal than before. Often, after pregnancy, the dysplasia will no longer be as severe.

You can safely have a colposcopy during pregnancy. Because it can take up to 10 years for cervical cancer to develop, you will not be given any treatment for dysplasia during your treatment. If you have previously had treatment with part of your cervix removed, be sure to tell your OB provider. Cervical dysplasia and HPV are not contagious to your baby and do not affect its development.