

CERVICAL DYSPLASIA

Other terminology

Cervical Intraepithelial Neoplasia [CIN] or Squamous Intraepithelial Lesions [SIL]

Cervical dysplasia (more commonly described as cervical intraepithelial neoplasia or CIN) refers to the presence of abnormal cells seen on the Pap (cervical) smear. These abnormal cells are obtained from the lining of the outer cervix and can range from mild to severe changes. A diagnosis of CIN changes is not cancer. However, the severe form of dysplasia can be considered a precancerous condition and may progress to cancer in several years if not treated.

Classification of CIN

CIN is divided into 3 groups, which is CIN I, II and III. This is based on the severity of the cell changes (dysplasia). CIN III refers to abnormal cells that involve the whole thickness of the surface lining of the outer cervix and has the highest chance of further progression to cancer.

Symptoms and signs.

Most women do not have any symptoms. The diagnosis is often made from the routine Pap smear screening. Some women may have abnormal vaginal bleeding. Occasionally, there may be excessive vaginal discharge or bleeding after sex.

Causes

There is an association with human papillomavirus (HPV). The HPV is usually acquired from sexual intercourse, but can, in rare instances, be acquired from skin-to-skin contact.

Risk Factors

- History of infection with the human papillomavirus (HPV), which may also causes genital warts.
- Smoking.
- Decrease immune response (e.g HIV infection, illness or on chemotherapy)
- Multiple sexual partners.
- Early age of first sexual intercourse (before age 18).
- Daughters of women who took diethylstilbestrol (DES) during pregnancy.

Prevention

- Vaccination against HPV infection – currently, there are two vaccines available for this purpose (Gardasil and Cervarix).
- Sexual monogamy of both partners.
- Regular cervical smears – this will not prevent dysplasia but will be able to detect it early. Treatment of dysplasia will prevent the development of cancer of the cervix.
- Do not smoke.
- Use of a diaphragm by the female or a condom by the male for sexual intercourse.

Complications

Severe dysplasia may progress to cancer of the cervix.

Investigations and diagnosis

- Cervical smear (Pap smear / liquid based cytology such as Thin Prep)
- HPV DNA (virus study) test – the procedure to do this test is similar to cervical smear.
- Colposcopy - this is a microscopic examination of the cervix, vagina or vulva. It is used to diagnose potential abnormalities of these areas, which sometimes cannot be seen with the naked eyes. The colposcope has the ability to magnify the tissue by up to 30 times, thus making it clearer and much more accurate in terms of surface evaluation. Therefore, the biopsy of the abnormal areas performed with a colposcopic examination is more accurate than those done without the use of a colposcope. A stain or other chemical agent is applied so that the abnormal areas will become more prominent and easily seen. Biopsy will be taken if necessary, and sent for histological examination. If a biopsy is done or endocervical curettage is performed, these procedures may cause some cramping or bleeding.

Treatment

- Spontaneous regression (reversal) does occur in a significant number of patients, especially those with mild dysplasia (CIN I). Therefore, a period of observation and follow-up may be advised in those with only CIN I changes.
- Treatment measures will vary depending on the degree and extent of the cervical dysplasia following the colposcopic evaluation and the biopsy report. Possibilities include cryotherapy (freezing), laser surgery, loop excision of the cervix or cone biopsy.
- These procedures can be performed in the office but most centres do it either as a daycase or an overnight stay. It does not cause pain and the recovery is quick. You will have vaginal bleeding for a few days, followed by watery and bloody discharge over the next 2 weeks.
- The outlook is excellent if the abnormal areas are completely removed. Sometimes, the margins of the removed cervical tissue may show abnormal cells (dysplasia), thus signifying incomplete excision. This can be treated either with a repeat procedure such as loop excision or a cold knife cone biopsy. Alternatively, the woman may opt for a hysterectomy, especially if she has completed childbearing,
- Rarely, complications can result from the treatment, such as excessive bleeding or infection.
- Follow-up care will depend on the treatment method used and whether the margins are clear of the abnormal cells.
- Follow-up cervical smears every 6 months, for 1 to 2 years, may be recommended to verify the success of treatment and to detect any recurrence. Additional screening for the HPV DNA virus may be done following surgical treatment and this may be of use to decide further management and follow-up schedule.

- Please discuss the screening intervals with your doctor. Annual screening is recommended once the repeated cervical smear is normal and HPV DNA virus is negative.
- If surgical treatment to the cervix is performed, you should delay sexual relations until a follow-up medical examination.

See your doctor immediately if there is:

- Excessive vaginal bleeding which soaks more than 1 pad each hour.
- Persistent and abnormal vaginal discharge.
- Signs of infection, including headache, muscle aches, dizziness or a general ill feeling and fever.

Disclaimer

This is for informational purposes only and is not intended to be a substitute for professional medical advice, diagnosis, or treatment. It is important for readers to seek proper medical advice when necessary.

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