Treatment Choices

Because the immune system can get rid of most mild dysplasia (low-grade SIL, CIN 1) without treatment, many providers follow these mild lesions closely and treat only if they do not go away, or if they ever show signs of becoming abnormal. Others may prefer to treat rather than “wait and see.” Moderate and severe dysplasia (high-grade SIL, CIN 2-3) is typically treated. When treatment is needed there are several options depending on factors such as age, where the dysplasia is located, if a woman is pregnant or has gynecological problems, and how much dysplasia is present.

Treatment options include cryosurgery (freezing abnormal tissue), laser (a powerful beam of light to cut or destroy tissue), LEEP (also known as LOOP or LLETZ, using a thin, electrically charged wire to cut away abnormal cells), and cone biopsy (removing a cone-shaped piece of tissue with a surgical knife, laser, or LOOP).

HPV Vaccines

The U.S. Centers for Disease Control and Prevention (CDC) recommends routine HPV vaccination for males and females beginning at age 11-12. The vaccine available in the U.S. protects against the “high-risk” HPV types found in 90% of cervical cancers in addition to covering the “low-risk” types that cause most genital warts.

HPV vaccines don’t protect against all types of HPV, though, so women need to continue having Pap tests and, as appropriate, HPV tests even after being vaccinated for HPV.
**What is HPV?**

Human papillomavirus (HPV) is the name of a group of viruses that infect the skin. Some types of HPV infect genital and anal skin and are sexually transmitted. Some types of HPV can cause external genital warts, while others sometimes lead to cell changes of the cervix that, if not detected, can lead to cervical cancer.

HPV is very common, and most sexually active people have the virus at some point, even though most never know. Most cases of HPV do not result in cancer or any long-term health problems.

**“Low-Risk” and “High-Risk” Types of HPV**

HPV types 6 and 11 are the most common types found in genital warts and can be found in some low-grade SIL or CIN 1. Since they are almost never found with cervical cancer, they are considered “low-risk.” Because of their link to cervical cancer, some types of HPV are called “high-risk.” These are usually found in both low-grade SIL (CIN 1) and high-grade SIL (CIN 2-3).

**What is a Pap test?**

Pap tests find cell changes caused by HPV. Most cell changes return to normal as the immune system controls the virus. When this doesn’t happen, the cells can become more abnormal and may lead to cancer.

**What is an HPV test?**

An HPV test checks directly for the genetic material (DNA) of HPV within cells and can detect the “high-risk” types connected with cervical cancer. For women age 30 and over, an HPV test can be done with the same cell sample taken during the Pap test. For women with normal/negative results, the Pap/HPV co-test should not be repeated more often than every five years.

In 2015, the FDA approved the first test to be used for primary cervical cancer screening for women 25 and older, followed by a Pap test for women with certain results. Women who test positive for the more aggressive HPV 16 and/or HPV 18 will be referred for colposcopy while those positive for any other HPV type will have a Pap test. Women who are negative for any HPV type will return for routine screening in three years.

**Detecting Abnormal Cells**

There are different systems used to report Pap test results. Ask your healthcare provider to explain anything that isn’t clear. Depending on your circumstances (see chart), you may need further evaluation, such as a repeat Pap test, an HPV test, or one of the following procedures:

- **Colposcopy** is a procedure in which a lighted magnifying instrument is used to look at the vagina and cervix. If abnormal changes are found on the cervix during this evaluation, a small piece of tissue may be removed by biopsy.
- **If** a sample needs to be taken from the inside of the cervical canal, an endocervical curettage (ECC) may be done – this uses a small, spoon-shaped instrument called a curette to remove tissue.

This tissue will be looked at under a microscope to decide whether it is normal or represents dysplasia (abnormal cell change). Mild dysplasia may also be referred to as either low-grade SIL or CIN 1, and moderate or severe dysplasia as high-grade SIL or CIN 2-3.

<table>
<thead>
<tr>
<th>Bethesda System</th>
<th>CIN System</th>
<th>What the Report Means</th>
<th>Next Steps</th>
</tr>
</thead>
<tbody>
<tr>
<td>Within normal limit</td>
<td>ASC-US</td>
<td>No abnormal cells, negative</td>
<td>Continue with normal screening</td>
</tr>
<tr>
<td>ASC-US</td>
<td>ASC-US: Cells that do not look entirely normal, but are not definitely abnormal. Most women with this Pap are normal, but a few will have high-grade SIL.</td>
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<tr>
<td>ASC-H</td>
<td>ASC-H: Similar to ASC-US reading, except the cells are abnormal in a way that means High-Grade SIL (see below) cannot be excluded.</td>
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<tr>
<td>Low-Grade SIL (LSIL)</td>
<td>CIN 1</td>
<td>Mildly abnormal cells. Changes are most often due to HPV. Most women with this reading have mild cervical dysplasia, but some (10-30%) may have more abnormal changes (High-Grade SIL, moderate or severe dysplasia, CIN 2-3).</td>
<td></td>
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<tr>
<td>High-Grade SIL (HSIL)</td>
<td>CIN 2-3</td>
<td>Moderately to severely abnormal cells. Changes are almost always due to HPV. Most women with this Pap reading will have more abnormal findings on the cervix (High-Grade SIL, moderate or severe dysplasia, CIN 2-3).</td>
<td></td>
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<tr>
<td>Cancer</td>
<td>Invasive Squamous cell carcinoma. Invasive glandular cell (Adeno) carcinoma.</td>
<td>The Pap will be read as suspicious for cancer if the cells are so abnormal as to indicate cancer. The possibility of cancer is high enough to require immediate evaluation but does not mean one definitely has cancer.</td>
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<tr>
<td></td>
<td></td>
<td>Colposcopy and biopsy. Referral to specialized evaluation and treatment as needed.</td>
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Colposcopy (and possible biopsy) is the preferred follow-up option for women with a positive HPV test (or if HPV status isn’t known). For women with an LSIL Pap result and a negative HPV test, though, repeating the Pap at 12 months is preferred (repeating the Pap in a year is also recommended for women ages 21-24 with LSIL Pap results).