Treatment Of Cervical Dysplasia

September 22, 2011
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How is cervical dysplasia treated?

There are many ways to treat cervical dysplasia (CIN). Factors influencing the choice of treatment for cervical dysplasia include the extent and severity of the dysplasia, the age of the woman, and whether or not she has any other gynecological problems. Often the experience of the physician or other clinician, and the availability of equipment are also major factors. The following are the most common methods of treating cervical dysplasia:

Cryotherapy
Cryotherapy, or freezing, is done by placing a probe against the cervix which cools the cervix to sub-zero temperatures. The cells damaged by freezing are shed over the next month in a heavy watery discharge. The main advantages of freezing are that it is simple to do and uses inexpensive equipment.

One problem with freezing is that the depth cannot be precisely controlled, so abnormal cells may be left behind. This is less of a problem with small areas of mild to moderate dysplasia, and more of a problem with severe dysplasia and carcinoma-in-situ. Another problem with cryotherapy is that the cervix often heals with the squamo-columnar junction, inside the canal of the cervix, making it difficult to see and causing problems with future evaluation. In spite of these problems, most authorities agree that freezing is an acceptable treatment for small areas of mild or moderate dysplasia. Cryotherapy has a high failure rate for treating large areas of dysplasia and dysplasia that extends into the cervical canal, so other methods are preferable when they are available. Although cryotherapy is acceptable, I have stopping using it many years ago because of the excellent results obtained with the laser.

Laser Treatment
The carbon dioxide laser uses a tiny beam of light to vaporize the abnormal cells. This can usually be done in the office with no or very little discomfort. The laser is directed through the colposcope so that the area and depth of treatment can be controlled precisely.

Healing after laser treatment is much faster than after freezing because dead tissue is not left behind. Studies using the latest techniques of laser treatment are showing lower failure rates with the laser than with freezing. Another important advantage is that the cervix usually heals with the squamo-columnar junction visible, so that future evaluation is easily carried out.

The major disadvantage of the laser over the cryo is that it requires sophisticated equipment, and most gynecologists do not have a laser in their office. It is much more expensive to do laser if it has to be done in the hospital. The laser is often replacing cryotherapy in centers where it is available. I believe that the laser is the treatment of choice for most cases of cervical dysplasia (CIN).

Loop Excision
Also known as “LLETZ” or “LEEP”, loop excision uses a fine wire loop with electrical energy flowing through it to remove the abnormal area of the cervix. The tissue removed is sent to the laboratory for examination. This procedure, therefore, can often treat and diagnose the problem at the same time. Loop excision is commonly done under local anesthesia and usually causes little discomfort. This can often be used as a substitute for cone biopsy.

Loop excision is sometimes done during the initial colposcopy exam. The advantage of this is that the problem is treated at the time of diagnosis, so it is not necessary to wait for lab results before treatment. At other times, a tiny sample may be taken at the time of the initial evaluation. This might show that no treatment is necessary or allow a choice of other treatment methods (such as laser).

Since many women may prefer time to consider treatment options before choosing a treatment
method, I prefer to evaluate the cervix by colposcopy during the first visit, and discuss treatment options at that time, rather than to treat the cervix before a woman has had time to think about her treatment choices.

There is a concern among experts that loop excision is being done for very minor abnormalities that do not require treatment. It is not unusual to see a woman who has had several loop excision procedures done when there was essentially nothing wrong with the cervix. When indicated, loop excision may be an excellent treatment method, but should be used only for significant problems and not just an "atypical" pap test.

**Cone Biopsy**

A cone biopsy removes a cone-shaped or cylinder-shaped piece of the cervix. It is usually done in an operating room and can be done with a laser or with conventional surgical instruments (cold-cone). A cone biopsy may be done for diagnosis or for treatment, although a diagnostic cone may treat the problem at the same time.

Although laser vaporization and cryotherapy are effective treatments for dysplasia, they are not suitable for invasive cancer. We must, therefore, be absolutely certain that there is not invasive cancer before treating with the laser or with cryo. If we cannot positively rule out invasive cancer on the basis of colposcopy, then an excisional biopsy is mandatory. (This means that the transformation zone of the cervix is removed and examined rather than destroyed.)

A cone biopsy may also be selected as treatment of dysplasia or carcinoma-in-situ. This treatment has a high success rate, but a "cold-cone" has a higher complication rate than a laser cone, cryo, or loop. In a small percentage of cases, a cone biopsy may interfere with childbearing. Many cases requiring cold cone biopsy in the past can be treated, with the laser or with the loop, with a lower chance of complications. Even though I see many women with difficult cases of cervical dysplasia in my practice, it has been many years since I have needed to do a cold cone biopsy!

**Hysterectomy**

If a woman with dysplasia or carcinoma-in-situ does not want to bear children in the future, then a hysterectomy may be chosen. It has the lowest recurrence rate of any treatment, but it is a major surgical procedure. If a patient has other problems that may be helped by hysterectomy, then this operation may be the best treatment, one that will take care of all of the problems at the same time. Even after a hysterectomy the dysplasia can come back on the vagina, so it is essential to get regular pap smears even if a hysterectomy is done.

**Why treat cervical dysplasia?**

Dysplasia is not cancer, but it can turn into cancer if it is not treated. By proper treatment of dysplasia and by proper follow-up, we can significantly reduce the chances that cancer might develop.

**Once dysplasia is treated can I forget about it?**

No! No matter how dysplasia is treated there is a possibility that it can recur. Usually a recurrence will not be a serious problem if it is detected early, but it can eventually develop into cancer if it is not treated. It is therefore essential to have regular checkups following treatment.

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