Loop Electrosurgical Excision Procedure (LEEP)

LEEP stands for Loop Electrical Excision Procedure. A LEEP procedure may be recommended as a treatment for abnormal cervical tissue or dysplasia. Dysplasia is the word used to describe precancerous cell changes found on the cervix and is characterized by degree of severity - mild, moderate or severe. The Human Papillomavirus (HPV) is believed to be the primary cause of most abnormal cervical tissue. LEEP is most commonly recommended as a treatment for moderate to severe dysplasia, although in certain situations it may also be used to treat mild dysplasia.

What should be expected during a LEEP?
The LEEP procedure utilizes an electrical current that passes through a thin wire loop, which is used to "scoop out" the abnormal tissue. Since the wire is very thin, there is very little damage to the surrounding tissue. The electrical current seals the blood vessels, which minimizes bleeding. The procedure is done in the doctor's office and does not require any sedating anesthesia. The procedure itself takes about 20 minutes. After a speculum is inserted into the vagina, the doctor will look at the cervix with the colposcope (a magnifying instrument) to clearly identify the area that is to be removed. A local anesthetic will be injected into the cervical tissue prior to the removal of any tissue. During the procedure there may be discomfort similar to menstrual cramps. Ibuprofen may be used to minimize cramping. A medicated paste may be applied after the tissue is removed to lessen bleeding. Usually no pain medication is required afterward. Since no sedation is required, you may be able to return to work or classes later the same day.

Are there treatment alternatives?
Abnormal pap smears can be treated in several ways. The physician may recommend LEEP, cryotherapy (freezing the cervical tissue) or use of a laser beam, depending on examination findings and the degree of dysplasia identified in tissue biopsies. In some cases, treatment may be deferred and close follow-up with colposcopic exams and pap smears recommended. You are encouraged to discuss all the treatment options and understand why your provider recommends a particular course of treatment.

Most cervical abnormalities can be treated with LEEP. Laser surgery may be recommended, especially if there is abnormal tissue identified on the external genital or internal vaginal tissue as well as the cervix. LEEP and laser procedures are not available at McKinley, but referrals will be provided to specialists who can perform the procedure. Cost for any procedure not done at McKinley Health Center is the responsibility of the patient, but may be partially covered by health insurance. Before scheduling a procedure, always consult with your health insurance carrier to determine what is covered by the policy.

What are the risks?
- Light headed or fainting sensations may occur during or immediately after the LEEP procedure. This is due to irritation of the nerve branches in the cervix. This reaction is less common when you have a good night's rest prior to the procedure. Eating a light, nutritious meal prior to the procedure also lessens this reaction.
- Mild bleeding may occur for 1-3 days following the procedure. This is usually lighter than a menstrual period. If bleeding becomes heavier than a period it should be reported to your health care provider. If bleeding is heavier than one pad per hour, emergency medical care is needed. If McKinley Health Center is closed, you will need to be seen and treated at a local emergency room. An increase in the amount of vaginal discharge is normal and may appear slightly yellow or brown. This may last for a few weeks following the procedure.
- Infection is always a risk when any surgical procedure is done. Infection can occur in the cervical tissue or in the uterus, fallopian tubes and ovaries. Report any fever (101°F/38.3°C or higher), foul smelling vaginal discharge or heavy yellow/green discharge or pelvic pain to the provider who did your procedure.
- Cervical changes may occur during the healing process. The cervical opening leading into the uterus may be smaller. This may make it more difficult to evaluate the cervical tissue during future pap smears. A scarred cervix rarely affects fertility; decreased mucus production may have an impact on sperm migration. A weakened cervix occasionally leads to premature delivery. Advise any future obstetrical care providers of your treatment for dysplasia.
- Occasionally, despite LEEP surgery, some abnormal tissue may reoccur. Approximately 10-20% of patients may have some persistence or reoccurrence of disease following the LEEP. This may occur because some viral remnants still remain in the tissue or because of repeated exposure to the virus.
Pre-LEEP Instructions
- LEEP cannot be done during your menstrual period.
- Get a good night's rest prior to the appointment and eat a light nutritious meal before your appointment (example - fruit and yogurt or fruit juice and toast/peanut butter, etc.).
- LEEP ordinarily should not be done if you are pregnant. Use a consistent method of birth control. Tell your physician if there is any chance of pregnancy.

Post-LEEP Instructions
- Do not have intercourse, use tampons or douche for four weeks after the procedure. Avoid vigorous exercise for one week (running, aerobics, sports etc.) to lessen the chance of bleeding.
- Call the provider who did your procedure if heavy bleeding or signs of infection occur. If the bleeding is saturating a pad every hour, seek emergency medical care in a local emergency department.
- Keep all follow-up appointments as recommended by your physician. Regular exams are needed every six months for one year to be sure that abnormal tissue does not reoccur.
- To protect the cervix during the healing process, use condoms consistently for six months after the procedure. You may continue a hormonal method of birth control such as birth control pills or Depo-Provera®, as well.

What should my partner do?
Currently there is no consensus among medical professionals regarding the correct way to diagnose and treat male partners of women who have abnormal pap smears. HPV is not easy to detect and may be present for years before it causes abnormal pap smears. Since the virus can be sexually transmitted, women may request that their partner be examined for sexually transmitted diseases, including HPV. These exams may be done at McKinley Health Center if the partner is a student, or at a local public health clinic, or by a private physician.

Reference: Up to Date 2009.