



Loop Electrosurgical Excision Procedure (LEEP)

What is LEEP?

LEEP stands for Loop Electrosurgical Excision Procedure. This is a procedure designed to treat and/or diagnose pre-cancerous changes on the cervix (the portion of the uterus visible in the vagina) in women with an abnormal Pap tests. This procedure has several other names which have been used to describe the process, including LLETZ (Large Loop Excision of the Transformation Zone), LLEC (Large Loop Excision of the Cervix), and Loop Cone Biopsy of the cervix. A fine wire loop which is attached to a high-frequency electrical generator allows very precise removal of abnormal tissue from your cervix. Because the procedure is so exact, and the loop very thin, there is very little damage to the tissue surrounding the area that needs to be removed, and the procedure allows for the blood vessels surrounding the area to be sealed.

The LEEP Procedure

The procedure should be done when you are not having your menstrual period, allowing for better view of the cervix. This also helps you determine if any post procedure bleeding you may have is abnormal. You may be given something for pain relief prior to the procedure.

- You will be placed in the room, with your legs in stirrups or supports.
- The speculum will be inserted as for a pap test.
- A local anesthetic will be injected (similar to the anesthetic you would get at a dental office). At the time of the injection, you may experience stinging or cramping while the anesthesia is being injected. You may also experience some increase in your heart rate with some of the local anesthesia, and possibly some shakiness of your legs. These symptoms are normal and related to the medication.
- A solution is applied to the cervix to show the abnormal area that needs to be removed.
- You will hear the sound of a smoke evacuator (like a vacuum). You will also hear a humming sound when the electrosurgical generator is being used. It is VERY important that you do not move when the electrosurgical generator is making a sound.
- You may feel cramping, however if you feel anything sharp, you should let the person performing the procedure know immediately. The removal of the tissue is over within a few seconds. The cautery portion of the procedure (burning of vessels after the procedure to prevent bleeding) takes a few minutes.
- Monsel's Solution (a green paste to assist in prevention of bleeding) is often applied, and the speculum is removed. The paste will cause a dark brown-black grainy vaginal discharge for several days after the procedure.

Risks of LEEP

Risks and complications from LEEP are very unlikely, however they include:

- * Heavy bleeding (more than our normal period)
- * Bleeding with clots
- * Severe abdominal cramping
- * Fever
- * Foul-smelling discharge (other than the odor from the procedure and Monsel's solution)
- * Incomplete removal of abnormal tissue
- * Narrowing of the cervix (cervical stenosis)
- * Infection
- * Accidental cutting or burning of normal tissue (usually with patient movement during the procedure)

Benefits of LEEP

The major benefit to LEEP is that this outpatient procedure is minimally painful and minimally invasive yet allows removal of abnormal tissue that can be thoroughly evaluated by the pathologist. There are few risks, and generally, no in-patient time is required for the procedure.

Post LEEP Instructions

Follow-up after LEEP is very important. You should expect some bleeding after the procedure, as well as some mild cramping and a black-brown discharge.

GENERAL INSTRUCTIONS:

- * Do not lift anything over 15 lbs.
- * Do not have intercourse for 4 weeks after the procedure.
- * Do not put anything (including tampons, a douche, fingers, vibrators, etc.) in your vagina for 4 weeks after the procedure.
- * You may take ibuprofen (generic or Motrin or Advil) as needed for mild cramping

You should call the clinic immediately should any of the following occur:

1. Bleeding heavier than a regular menstrual period, with excessive bleeding or excessive clots.
 2. Any severe abdominal cramping.
 3. Any temperature over 101 degrees F.
 4. Discharge with an odor is not unusual, however if you have any pus from the vagina, or are concerned you should contact your health care provider.
- If the symptoms occur after clinic hours or on the weekend, please call or go to your local Emergency Department if you feel you have an emergency.