



PROCEDURE EDUCATION LITERATURE

We recommend that you read this handout carefully in order to prepare yourself or family members for the proposed procedure. In doing so, you will benefit both the outcome and safety of the procedure. *If you still have any questions or concerns, we strongly encourage you to contact our office prior to your procedure so that we may clarify any pertinent issues. "An educated patient is the best patient"*

ENDOMETRIAL ABLATION

Definition

Endometrial – pertaining to the tissue layer that forms the inner lining (endometrium) of the uterine (womb) wall

Ablation – Removal of a body part or the destruction of its function, as by a surgery, disease, or noxious substance.

Hystero – of or denoting the womb (uterus)

Scopy – examination with an instrument for improved viewing, often with magnification and directed lighting

Heavy or irregular vaginal bleeding is a common problem for women in their reproductive years. The menstrual cycle is designed to prepare a healthy endometrial lining for a fertilized egg to grow in. Once a month, if a woman does not become pregnant, the "old" lining is shed through the cervical canal with the menstrual period and replaced with "new" lining in preparation for pregnancy. This cycle is repeated throughout a woman's lifetime until her ovaries no longer make enough of the hormones needed to continue a regular, monthly cycle. Alterations in this cycle and irregularities of the lining of the uterus (such as polyps or fibroids) can lead to episodes of vaginal bleeding that are unpredictable, heavy, or cause significant discomfort.

Irregular uterine bleeding during your reproductive years is rarely due to uterine cancer. Uterine cancer is more common in older women than in younger women, and in women with continuous high levels of estrogen. It is, however, important that the cause of bleeding be investigated and treated. Cancers of the uterus, when discovered early in their development, can be cured.

There are several tests your doctor may perform to investigate the cause of your abnormal uterine bleeding prior to initiating treatment or continuing unsuccessful treatments. Many times it is necessary to sample the endometrium (with an endometrial biopsy or D&C) to look for concerning overgrowth (hyperplasia) and malignancies (cancer) of the lining. Visualization of the contour and any irregularities of the uterine lining can be accomplished with ultrasound, x-rays or direct visualization using a hysteroscope.

After successfully excluding irregularities of the uterine lining and shape of the cavity, your doctor will begin medical treatment. Medical treatment of heavy uterine bleeding commonly involves the combinations of hormone therapy (estrogen and/or progesterone), anti-inflammatory medications, and occasionally steroids and medications to cause a "medical menopause". This approach is usually very effective, but when medical treatment fails, the next step typically involves surgery.

Surgical treatment of heavy or excessive uterine bleeding includes dilation and curettage, endometrial ablation and hysterectomy. Dilation and curettage can be a useful procedure to treat sudden heavy bleeding that has resulted in severe anemia; however, for most women it offers no long-term improvement. Approximately 600,000 hysterectomies are performed each year in the United States. Almost half of these are done for abnormal bleeding. For women who wish to preserve their uterus, who wish to avoid major surgery, or are at increased surgical risk (from other conditions), but who are finished with childbearing, treatment may be performed by endometrial ablation.

Endometrial ablation, the destruction of the lining of the uterus, is an alternative to hysterectomy for many women with heavy uterine bleeding who do not respond to medical management. This is a procedure that has traditionally been performed in the outpatient (same-day) surgery center but now can also be performed in your doctor's office with devices designed for that purpose. Most women have a rapid recovery with little discomfort and are able to return to normal activity by the following day. Women who wish to preserve fertility or who have significant menstrual pain are not candidates for endometrial ablation and should consider alternative treatments.

The vast majority of women are pleased with the results of their procedure, though only some will have a complete absence of uterine bleeding after ablation. The success of endometrial ablation varies depending on the method of ablation, the presence of irregularities of the uterine contour, and the goals of the treatment.



Preparation

In office procedure: Preparation for an in-office ablation will depend on the method of pain control used by your doctor. The procedure can be comfortably performed with administration of oral or intravenous medications, usually along with injection of local anesthetic. Intravenous medications are given to produce a "conscious sedation" and often require an empty stomach. Your doctor will give you instructions based on the planned procedure and anesthetic choice.

Outpatient hospital procedure : As with all procedures in which general anesthesia is administered, you will be asked not to eat or drink anything after a certain time, typically midnight, on the evening prior to your surgery. You may brush your teeth in the morning but should not swallow the water. If you are on medications that must be taken, you will have discussed this with us and/or the anesthesiologist and instructions will have been given to you. ***Please refer to the attached list and tell us if you took any of these within the past 10 days.*** If your new medication is not on the list, alert us immediately so that we may ensure optimal procedure safety. We will have reviewed all of your current medications with you during the pre-operative/pre-procedure consultation. You are obligated to inform us if anything has changed (medication or otherwise) since your previous visit.

Procedure

Endometrial ablation is an outpatient procedure that takes between 30 minutes and one hour to complete, though some in-office procedures are quite brief. If you are to receive any medication for pain control and sedation, it will be given before the procedure begins.

You will be lying on your back with your knees bent and heels in stirrups as you would for a pelvic examination. A brief examination to find out the location of your cervical opening and the size and shape of your uterus will be done.

Following this, a speculum will be placed in the vagina to hold it open and an antimicrobial soap will be used to clean the vagina and cervix. Again, depending on the method of anesthesia, an injection of numbing medicine into the cervix might be given at this point. The cervix is lightly grasped with an instrument to hold it still, while the opening is gradually dilated with surgical instruments until the hysteroscope or ablation probe can be inserted without force.

The cavity of the uterus is much like a balloon: when empty it is flat but when inflated, space is created inside the balloon where there was none. Performing hysteroscopy involves "inflating" the cavity of the uterus with a liquid or gas so that each surface can be seen. Miniaturized instruments can then be placed along with the hysteroscope to correct many of the abnormalities of the shape of the cavity. When your doctor performs a hysteroscopic ablation (using a resectoscope), the lining is either cut out using miniaturized cutting instruments designed for ablation or destroyed using electrical energy. A resectoscope can also be used to remove polyps of the lining or fibroids on the surface before or as part of ablation.

Destruction of the lining can be accomplished by a variety of methods: heating, freezing, and electrical energy. The method used will vary depending on your circumstances, anatomy, and what is available for your doctor's use.

Post Procedure

Recovery from endometrial ablation is rapid, and most women will go home within one or two hours of the procedure. Though you may have some discomfort and cramping following the procedure, it is not necessary for you to plan time off from work or your normal activities beyond the day of surgery. It is normal to have some bleeding and discharge following endometrial ablation. It is suggested that you use menstrual pads to maintain hygiene and protect your clothing. You are instructed to refrain from vaginal intercourse, douching, and tampon use until told you may resume by your doctor.

Medications, such as ibuprofen or naproxen, are usually all that is needed for the cramping you might have after your surgery. Ask your doctor what is recommended or if a prescription for pain medicine will be given. An antibiotic prescription may also be given and should be taken until completion. If any side effects occur, contact our office immediately.

Expectations of Outcome

Endometrial ablation is an alternative to hysterectomy for women with abnormal uterine bleeding. The vast majority of women are pleased with the results of their procedure, though only some will have a complete absence of uterine bleeding after ablation. The success of endometrial ablation varies depending on the method of ablation, the presence of irregularities of the uterine contour, and the goals of the treatment. Following endometrial ablation:

- 90% of women will be pleased with the results
- Between 2.5% and 60% of women will have complete absence of uterine bleeding
- 40% of women will have decreased uterine bleeding
- One in four women will have hysterectomy within four years of treatment

Possible Complications of the Procedure

All surgical procedures, regardless of complexity or time, can be associated with unforeseen problems. They may be immediate or even quite delayed in presentation. While we have discussed these and possibly others in your consultation, we would like you to have a list so that you may ask questions if you are still concerned. Aside from anesthesia complications, it is important that every patient be made aware of all possible outcomes, which may include, but are not limited to:



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- **Perforation of the Uterus:** The most serious complication of the procedure is the creation of a perforation, or hole, in the wall of the uterus. This occurs when the dilator, hysteroscope, or ablation probe is pushed too far or with too much force. Perforation of the uterus may lead to injury of other structures and organs within the abdomen (blood vessels, nerves, intestines, and bladder), bleeding, or infection. Perforation is not common, however, may require another operation to be treated appropriately.
- **Bleeding / Discharge:** Most women will have watery or bloody discharge for several weeks following ablation. If you develop a foul smelling or greenish vaginal discharge, please contact your doctor.
- **Infection:** Endometrial ablation involves placing instruments through the vagina and cervix into the uterus. Because of this, it is possible to introduce a microorganism (such as bacteria or yeast) from the vagina into the uterine or abdominal cavity. Many microorganisms are normally present in the vagina and cause no infection or other symptoms. However, when these same microorganisms are present within the pelvis or cavity of the uterus or abdomen, a more serious infection can be the result. Signs of infection that you should be watchful of are: foul-smelling vaginal discharge, tenderness or pain in the vagina and pelvis for more than two days, fevers, shaking chills, nausea, vomiting, weakness, and feeling ill.
- **Hematometrium:** Blood may collect within the uterine cavity if scarring from the procedure prevents its exit. This may lead to cyclic abdominal pain.
- **Injury to Abdominal Organs:** Risk of injury to abdominal organs is reduced through careful surgical technique and safety systems built into the ablation devices. In spite of this, there is a small risk of internal injury with endometrial ablation.
- **Pregnancy:** Although the chances of pregnancy are reduced following endometrial ablation, it is still possible to become pregnant. Pregnancy following endometrial ablation is very dangerous to both you and the fetus. You should not have an endometrial ablation if you plan to become pregnant in the future and should use some form of birth control after endometrial ablation.
- **Detection of Malignancy:** Another rare, but important, risk of any endometrial ablation procedure is that it may decrease your doctor's ability to make an early diagnosis of cancer of the endometrium. The reason for this is that one of the warning signs of endometrial cancer is bleeding, and endometrial ablation procedures decrease or eliminate bleeding.
- **Treatment Failure:** While endometrial ablation has been shown to be very effective, it will not always "cure" uterine bleeding. One out of 10 women who have endometrial ablation will be dissatisfied with her results. Only half of women will be completely without uterine bleeding. One out of four women will have a hysterectomy in the following four years.
- **Fluid Imbalance:** In addition to water, fluids used to "inflate" the cavity of the uterus for hysteroscopy contain dissolved sugars, starches, and salts. These substances give the fluids certain desirable properties for visualization of the uterine cavity. When too much fluid flows from the uterus and enters the abdominal cavity or blood stream, an "imbalance" in the water content of the blood may result. Careful choice of fluid and monitoring of fluid delivery make this an uncommon complication.
- **Deep Vein Thrombosis (DVT)/Pulmonary Embolus (PE):** In any operation (especially longer operations), you can develop a clot in a vein of your leg (DVT). Typically, this presents two to seven days (or longer) after the procedure as pain, swelling, and tenderness to touch in the lower leg (calf). Your ankle and foot can become swollen. ***If you notice these signs, you should go directly to an emergency room and also call our office.*** Although less likely, this blood clot can move through the veins and block off part of the lung (PE). This would present as shortness of breath and possibly chest pain. We may sometimes ask the medical doctors to be involved with the management of either of these problems.
- **Lower Extremity Weakness/Numbness:** This, too, is a rare event that may arise due to your position on the operating table. It is possible in procedures in which you are in the lithotomy (legs up in the air) for a long period. The problem is usually self-limited, with a return to baseline expected.
- **Chronic Pain:** As with any procedure, a patient can develop chronic pain in an area that has undergone surgery. Typically, the pain disappears over time, although some feeling of numbness may persist. If persistent, further evaluation may be necessary.

Patient

Date

Physician

Date

Witness

Date