

## What is Morcellation?

**Morcellation** is a procedure that cuts large tissue inside the body into smaller pieces so it can be removed through the vagina or a small incision on the abdomen.

**Power morcellator** is an electrical device that is inserted into the abdominal cavity that is used to help with morcellation.

Morcellation is an option in surgery and you can choose not to have it done. If you choose not to have it done, this will not interfere with your decision to have surgery, but may change the way in which surgery will be performed (it may need to be done through a larger incision).

Please be sure you ask all your questions, especially if there are things you don't understand about your surgery or the possible use of the morcellation or the power morcellator. There are both potential benefits and harms if morcellation is performed.

## How is Morcellation performed?

- Morcellation is only performed when the tissue being removed is too large to fit through the incisions used for the surgery. This is most likely to happen if the uterus or fibroids are too large to be removed in one piece through the vagina or the laparoscopic or robotic incisions.
- There are several ways your surgeon may perform morcellation. Some examples include:
  - Cutting the tissue into fragments with a scalpel and removing the smaller pieces through the vagina or a 2 to 3 inch incision on the abdomen (called a mini-laparotomy).

- Using an instrument called a power morcellator.
- The way morcellation is performed is often determined during the surgery. The method of morcellation depends on each patient's wishes, risk factors, surgical procedure and the size and/or shape of the tissue being removed.
- If the tissue being removed is too large to fit through the vaginal opening or the small incisions used with laparoscopic or robotic surgery and morcellation is **not** performed, you will need to have the tissue removed through a larger incision on your abdomen.

### **What are the benefits of Morcellation?**

- You are a candidate for a minimally invasive surgery. Morcellation allows us to remove large tissue specimens through small incisions which can have several benefits compared to large abdominal incisions.
- Surgeries performed with smaller or no incisions on the abdomen, such as vaginal or laparoscopic surgeries, are associated with lower blood loss, faster recovery of normal bowel function, less post-surgery pain, and lower risk of complications such as wound infection and blood clots, when compared to large abdominal incisions.
- Smaller incisions are also associated with faster healing time, shorter hospital stay, and faster return to usual activity compared to larger incisions.

### **What are the risks of Morcellation?**

- Morcellation can spread the tissue to other parts of the abdominal cavity, and this spread may be greater with use of the power morcellator. Here at the University of Michigan, the morcellation procedure is usually performed inside a sterile plastic bag placed in the abdomen to decrease the risk of spreading tissue. The smaller tissue pieces are then removed inside the bag at the end of the procedure. Performing morcellation in a bag may not be

possible in every operation, and it is possible that the bag may break, or that tissue may spill from the bag.

- If you have fibroids, spread of fibroid tissue could rarely result in a benign condition called “disseminated peritoneal leiomyomatosis”, in which small pieces of fibroid implant and grow on the abdominal lining or the bowel.
- Despite testing available today (endometrial biopsy, pap smear, imaging, blood work), not all cancers of the uterus and cervix can be diagnosed before surgery. For example, a serious group of cancers called uterine sarcoma (which look similar to non-cancerous fibroids) cannot be ruled out in every case prior to surgery. Definite diagnosis can only be done by looking at the tissue under a microscope, which takes about one week after the procedure is completed.
- Studies estimate that these cancers occur in less than 0.5 percent of women undergoing surgery for uterine fibroids. For example, the Food and Drug Administration (FDA) estimates that uterine sarcoma occurs in approximately 1 in 360 women (0.28%) undergoing surgery for presumed fibroids. The Agency for Healthcare Research and Quality estimated the risk of unexpected leiomyosarcoma (a type of uterine sarcoma) at approximately 1 to 13 in 10,000 (0.01% to 0.13%) women undergoing surgery for presumed fibroids.
- If laparoscopic power morcellation is performed in women with unsuspected cancer, there is a risk that morcellation will spread the cancerous tissue within the abdomen and pelvis, which could significantly worsen their long-term survival.
- Because of the possible but rare risk of spreading cancer, **the FDA has made the following statements:**
  - **Power** morcellators should not be used to morcellate tissue with known or suspected cancer, and should not be used in women who

are perimenopausal or postmenopausal because the risk of sarcoma appears to be higher in these women.

- The FDA has also stated that the **power** morcellator should not be used in patients who can have their tissue removed in a single piece (without morcellation) through the vagina or small incisions.

Please discuss with your surgeon any questions or concerns you have about the use of morcellation, including the power morcellator, during your operation.

Please let your surgeon know if you object to morcellation, either with or without the use of the power morcellator.

For more information about morcellation, please visit the following websites:

- American College of Obstetricians and Gynecologists: [www.acog.org](http://www.acog.org)
- U.S. Food and Drug Administration:  
<https://www.fda.gov/MedicalDevices/ProductsandMedicalProcedures/SurgeryandLifeSupport/ucm584463.htm>

Please call us if you have any questions or concerns:

- Von Voigtlander Women's Hospital: (734)763-6295
- Northville Health Center: (248) 305-4400
- Chelsea Health Center: (734) 475-4003

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