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## **Surgery for Uterine Fibroids**

Many women have benign tumors in their uterus called fibroids (myomas). These fibroids may be silently present and cause no problems. In other women, the presence and location of fibroids can cause excessive menstrual bleeding, frequent menses, and even severe anemia from chronic blood loss. Other women may not experience abnormal bleeding but may have fertility problems associated with their fibroids. These problems may include recurrent pregnancy loss or infertility. Finally, some women with fibroids will have symptoms of pelvic pressure including difficulty in having a bowel movement or emptying their bladder.

If conservative surgery for uterine fibroids is recommended there are three alternatives:

- 1. Exploratory laparotomy with myomectomy
- 2. Laparoscopy / Robotic-assisted myomectomy
- 3. Hysteroscopic myomectomy

Of note, uterine artery embolization is not advised for women with fibroids who wish to preserve their ability to have children.

Current research has supported the removal of fibroids if they are bulging into the uterine cavity. Other studies also recommend removal of fibroids if they are greater than or equal to 5 cm and in the muscle of the uterus. Fibroids that compress the fallopian tubes may also need to be removed to restore tubal function. It is still controversial to remove fibroids between 3 and 5 cm, multiple small fibroids, or fibroids adjacent to the uterine cavity which may cause distortion. This latter condition, fibroids causing uterine cavity distortion, has recently come under intense scrutiny as the subject studied with many ongoing studies. If a patient has a history of infertility or recurrent pregnancy loss, often these fibroids are recommended to be removed.

## Remove fibroids if:

- in cavity
- >5 cm
- Compressing tube

## Consider removal if:

- 3-5 cm
- Multiple fibroids
- Distorting linings

If an exploratory laparotomy with myomectomy is undertaken, an incision in the abdominal wall is used to enter the pelvic cavity and identify the fibroids on the uterus. During this major surgery, fibroids are carefully removed and the uterus is sewn back together with exquisite care in order to restore a strong uterus for carrying a pregnancy. Blood loss from the surgery and postoperative adhesions are two of the possible complications from this procedure; however, many patients undergo surgery without complications.



If laparoscopy with myomectomy is undertaken (either conventional or robotic-assisted), this is an outpatient procedure and may require up to 1 week off work. Three to four half-inch incisions are made in the abdomen with one at the umbilicus in order to introduce a small camera into the pelvis. Instruments are then placed through the other incisions and the fibroids are removed through the small incisions. Robotic-assisted myomectomy may allow for more precise removal and repair of the uterus with myomectomy.

A newer addition to laparoscopic myomectomy involves techniques called laparoscopic myolysis. This is performed through the laparoscope but instead of cutting into the uterus to remove the fibroids, a bipolar electrical needle is used to coagulate the fibroids resulting in a 50% size reduction after surgery. This myolysis procedure may reduce the risk of bleeding and is a more rapid procedure; however there are fewer long-term outcome reports for pregnancies after this procedure. Also there is the possibility that fibroids may grow back. After a laparoscopic myomectomy, the uterus should be strong enough to carry a pregnancy, but there have been reports of uterine rupture with labor contractions.

The third alternative is a hysteroscopic myomectomy. For fibroids that are within the uterine cavity or where at least 25% of the fibroid mass extends into the uterine cavity, the fibroid can be taken out through a hysteroscope which is introduced through the cervix into the uterus. This is an outpatient procedure where patients may go home the following day and usually require only several days off work. The risks of this procedure include infection and intrauterine scarring. Repeat surgery can fix the intrauterine scarring in most cases and hormone supplementation and antibiotics will be often given in order to help prevent scarring.

If you have uterine fibroids noted at the time of your exam with your reproductive endocrinologist, the doctor will make recommendations for which type of surgery is best for you. The discomforts of surgery exist with all procedures and there are differing potential complications from each; however, all procedures are associated with an excellent cure rate and improvement of symptoms, reduction of miscarriages and often time's improvement in fertility.

