



Morcellator Hysteroscopy:

NEW TREATMENT FOR MENORRHAGIA

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Foothills Hospital Designated as Regional Training Site

Boulder Community Foothills Hospital has been designated as the Rocky Mountain area's first regional training site for physicians wishing to learn how to perform morcellator hysteroscopy using the Smith & Nephew Operative Hysteroscopy System. The hospital joins training centers in Boston, Chicago, Dallas and Houston. Drs. Hansen and Ryan will be part of the training team.

Menorrhagia, or heavy menstrual bleeding, is one of the most common complaints encountered by primary care physicians and gynecologists.

The condition severely impacts quality of life. The traditional primary treatment for menorrhagia caused by submucosal myo-

mas or endometrial polyps involved major surgery, with menorrhagia responsible for almost 20 percent of U.S. hysterectomies. Morcellator hysteroscopy is at the forefront of what will become a new, less-invasive standard of care for treating menorrhagia caused by myomas or polyps.

Between five and ten percent of all U.S. women complain to their doctors about menorrhagia,¹ which affects more than 10 million annually.² Menorrhagia is defined as menstrual loss of more than 80 mL. This translates to menses that continues for more than seven days or the use of more than 10 pads or tampons per day. It is most commonly associated with perimenopause.³

Although menorrhagia is not fatal, it can cause chronic anemia, pelvic pain and cramping. The condition also severely impacts quality of life by disrupting work, social functioning and family life.²

Menorrhagia can have hormonal or non-hormonal causes. Uterine fibroids, or

myomas, are a common non-hormonal cause.³ Clinically, there are three main types of myomas, classified according to their location in the uterus:

- Intramural myomas grow within the uterine wall.
- Subserosal myomas develop in the outer portion of the uterus.
- Submucosal myomas grow just under the lining of the uterine cavity and near the endometrial cavity.

It's this last group of myomas, the submucosal, that have the most effect on menorrhagia.^{4,5} Because of their location on the endometrium, these myomas place pressure on the uterine lining that builds with each menstrual cycle. This, in turn, can cause heavy bleeding. Even very small submucosal myomas may cause very heavy bleeding.

Endometrial polyps are another non-hormonal cause of menorrhagia. These hyperplastic overgrowths of glands and stroma form a mushroom-like fold that projects into the uterine cavity. They can be single or multiple growths.

Morcellator Treatment

- Performed on an outpatient basis under general anesthesia or with sedation.
- Requires a short recovery period of 2-3 days before resumption of full activity.
- Typically performed on small-to-medium lesions (< 4 cm diameter) with less than 50 percent intramural extension.
- A clinical trial of the new morcellator procedure is underway at six hospitals across the United States, including Porter Adventist Hospital in Denver.

Shortfalls of Conventional Hysteroscopy

Only a few years ago, the primary way to treat menorrhagia caused by myomas or polyps involved major surgery, including the often ineffective Dilation and Curettage (D&C) and the very invasive hysterectomy. Although these are still widely used treatments—with menorrhagia responsible for almost 20 percent of U.S. hysterectomies and 40 percent of D&Cs³—there are now other less-invasive options.

In recent years, hysteroscopic treatment has become an effective option. Hysteroscopic myomectomy is a major advancement for treating submucosal myomas,⁶ and hysteroscopic polypectomy for endometrial polyps.⁷

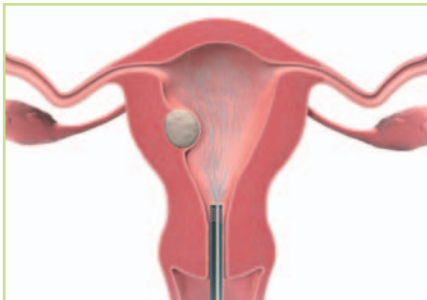


Figure 1

A hysteroscope is inserted past the cervix. Saline fluid is then pumped through the hysteroscope to distend the uterus.

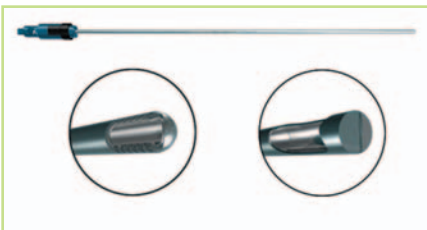


Figure 2

An appropriate morcellator probe is selected and inserted through the hysteroscope.

Conventional hysteroscopic treatment typically uses a resectoscope equipped with

a wire-loop electrode. The resectoscope is passed into the uterine cavity by way of the endocervical canal, and the uterine cavity is distended with a non-electrolyte solution. The surgeon then removes the intrauterine lesions using an electro-surgical technique.

Even though conventional hysteroscopic treatment is a less invasive means of removing intrauterine lesions compared with older treatments, it still has some weaknesses. During conventional hysteroscopic treatment, the surgical instruments must be removed periodically so that an active suction can be inserted to clear debris from the visual field. The surgeon must pass both the hysteroscope and resectoscope in and out of the uterine cavity numerous times to remove excised tissue. This process is very time consuming and increases the risk of puncturing the uterus.

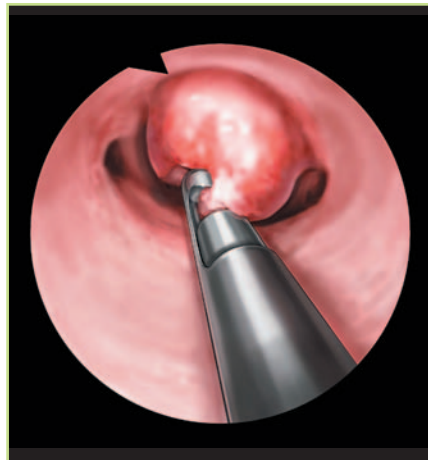


Figure 3

The morcellator's tip is placed against the tissue. The morcellator then simultaneously shaves and removes the tissue.

Also, when a resectoscope is used, the surgeon must rely on electrolyte-free solutions for distension and irrigation. These fluids have been known to cause sodium imbalances and fluid overloading. There is also some risk of thermal injury.

Quicker, Simpler, Safer Lesion Removal

Morcellator hysteroscopy is the most recent innovation in hysteroscopic treatment, delivering several advantages over conventional techniques for the removal of submucosal myomas and endometrial polyps. Only a handful of U.S. surgeons currently offer the procedure.

Approved by the FDA in 2004, morcellator hysteroscopy uses a probe with a "uterine shaver." Once placed inside the uterine cavity, the device shaves off and immediately suctions out any excised tissue that might impair visibility. The ability to remove and instantly suction out tissue fragments means the hysteroscope and morcellator are inserted only once, for initial entry. This is a huge advantage from both the physician's and the patient's point of view.

For the physician, the immediate removal of tissue through the probe makes surgery much simpler to perform and requires less surgical time. A recent study showed that this new method cuts average operating time in half.⁸ For myomas, the mean morcellator operating time was 16.4 minutes compared to 42.2 minutes for resectoscopy. For polyps, mean morcellator time was 8.7 minutes compared with 30.9 minutes for resectoscopy.

The advantage for the patient is a much safer treatment. Shorter operating time means less exposure to general anesthesia and puts the patient at less risk of fluid overloading. There is also a reduced risk of puncturing the uterus from multiple entries of surgical instruments.

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BCH's Breast Specialist — Boulder Community Hospital's new Certified Breast Health Specialist is Lynne Bentley, RN.

Bentley is a masters prepared nurse with a clinical specialty in oncology and subspecialties in skin cancer/melanoma and breast cancer. She has been an oncology nurse since 1985 and an advance practice oncology nurse since 1992. She became a Certified Breast Health Navigator in 2005. Bentley has been a member of Sigma Theta Tau, the national honor society of nursing, since 1985.

Bentley also has an MBA and extensive experience in health care management and developing and sustaining new programs.

She has completed all but the dissertation on her doctorate in nursing, focusing on the patient experience of healing and health, with a concentration on the relationship between spirituality and healing in patients with life-threatening illnesses.

The Breast Health Specialist helps physicians by serving as a triage manager in assessing patient's educational and social needs, communicating information back to the physician and by appropriately referring to the proper source for help.

The Breast Health Specialist is also an educator for other medical personnel in understanding benign and malignant diseases, their treatment and the patient's emotional and social recovery from the disease.

The Breast Health Specialist uses public speaking engagements as an opportunity to educate the public on the early detection of breast disease and breast exam skills. As a member of the State Breast Cancer Coalition, the BCH Breast Health Specialist is a public advocate for the needs of Boulder County breast cancer patients and their families.

This position requires skills as a support group leader. The Breast Health Specialist is charged with developing and maintaining breast cancer support groups and assisting with others, such as the newly formed support group for children and teens who have a family member with cancer. (For information on this support group, call 720-854-7057.)

In summary, the Breast Health Specialist remains a constant caregiver and overseer of the patient and family's educational, emotional and social needs while assisting the patient and family to navigate the health care system.

Boulder Community Hospital's Breast Health Specialist, Lynne Bentley, RN, can be reached at 720-854-7057.

Morcellator *continued from page A5*

There are other advantages as well. Since the morcellator does not rely on electro-surgical techniques, the surgeon can use a saline solution for distension and irrigation instead of an electrolyte-free solution. This minimizes the risk of sodium imbalance and thermal injury.

Summary

Morcellator hysteroscopy is at the forefront of what will become the new

standard of care for treating menorrhagia caused by submucosal myomas or endometrial polyps. The new procedure (1) shortens operating time by quickly removing tissue, which reduces the patient's exposure to anesthesia and risk of fluid overload; (2) requires only a single entry of surgical instruments, reducing the risk of puncturing the uterus; and (3) uses a non-electrosurgical technique to avoid the risk of thermal injury and reduce the risk of sodium imbalance.

Drs. Hansen and Ryan are two of only a handful of U.S. surgeons currently offering the procedure. They can be reached at 303-444-5110. Their practice web site is www.bwcpc.com.

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