NATIONAL WOMEN'S HEALTH NETWORK
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2007 Fibroid Fact Sheet

Fibroids

What are fibroids?
Common name: Uterine Fibroids
Medical name: Uterine Leiomyomata (pronounced you-ter-in lie-oh-my-oh-mah-tah)

Uterine fibroids are tumors or lumps made of muscle cells and other tissue that grow within the walls of the uterus. Fibroids may grow as a single tumor or in clusters. A single fibroid can be less than one inch in size or can grow to eight inches across or more. A bunch or cluster of fibroids can all vary in size. Uterine fibroids are the most common, non-cancerous tumors in women of childbearing age.

What are the risk factors for developing uterine fibroids?
Current statistics show that African-American women are three to five times more likely to develop fibroids than women of other racial groups[1]. Women who are overweight or obese for their height based on body mass index are also at a slightly elevated risk for developing fibroids as compared to women who are an average weight for their height. Research shows that women who have given birth are also at lower risk for developing uterine fibroids. However, because researchers don't know what causes fibroids, it is difficult to decipher all the risk factors.

Where do uterine fibroids grow?
Most fibroids grow within the walls of the uterus. Healthcare providers classify fibroids into three groups based on where they grow:
a) Submucosal fibroids grow just underneath the uterine lining.
b) Intramural fibroids grow in between the muscles of the uterus.
c) Subserosal fibroids grow on the outside of the uterus.
What are the symptoms of uterine fibroids?

Many women with uterine fibroids don't feel any symptoms, however for about 30% of women in their childbearing years fibroids can cause any combination of the following symptoms: heavy bleeding, anemia, abdominal pain or pressure, incontinence, or constipation[1]. Other symptoms might include painful periods, bleeding between periods, feeling "full" in the lower abdomen—sometimes called "pelvic pressure", urinating often, pain during sex, lower back pain, reproductive problems, such as infertility, multiple miscarriages, and early onset of labor during pregnancy.

Self-Help Treatments for Fibroids
Women who are taking estrogen may be able to reduce the growth of fibroids by discontinuing their use of the hormone. Some women try to prevent or reduce fibroid growth by avoiding processed foods and the hormones usually found in commercial meat, dairy and egg products, however there is no solid scientific evidence proving the efficacy of this approach. For many women yoga exercises

are another simple and useful way of easing some of the discomfort associated with fibroids.

Biomedical Treatment Options for Fibroids

Watchful Waiting

Of the more than 75% of women who will be affected by fibroids during their childbearing years, only 30% will experience symptoms to such an extent that intervention will be required[1]. If symptoms are not interfering with the individual's daily life she might consider using the "watch and wait" method. Depending on the size, growth rate and level of discomfort caused by the fibroids, individuals might simply choose to monitor their fibroids with a yearly pelvic exam. If fibroids are larger, rapidly growing or causing a high level of discomfort in the individual's life, she may want to schedule more frequent exams and consider using sonogram technology to monitor her fibroids. In either approach, patients should work together with their health care provider to evaluate the status of their fibroids and decide if/when intervention is desirable or necessary.

Drug Therapy, Alone or in Combination with Surgery

a) NSAIDs or "nonsteroidal anti-inflammatory drugs" like ibuprofen, aspirin and naproxen can help control cramps and bleeding (by slowing down the production of prostaglandins) associated with fibroids[4].

b) The Pill is occasionally prescribed to control fibroids, especially if the individual is experiencing troubling symptoms like excessive or irregular bleeding. However, new research conducted by the National Institute for Child Health and Human Development (NICHD), of the National Institutes of Health (NIH), indicates that fibroids are not significantly responsive to reproductive hormones. According to the NICHD's 2004 study conducted by Dr. Phyllis Leppert and Dr. James Segars, fibroids are made up of abnormal tissue that is not particularly affected by reproductive hormones. For this reason, researchers assert that hormone therapy may shrink fibroids slightly but will not eliminate them altogether[3].

c) GnRH Agonists (or gonadotropin-releasing hormone agonists) are prescribed as a method for shrinking fibroids. GnRH agonists prevent the body from producing estrogen, which, since fibroids need estrogen to grow, helps shrink existing fibroids. GnRH agonists are also sometimes used in combination with surgery, which, at its best, forces fibroids to shrink pre-operation and allows for shorter, less complicated surgeries. At its worst, GnRH agonists in combination with surgery can make fibroids soft and hard to remove, or shrink the fibroids to such an extent that they are overlooked during surgery[4].

Uterine Artery Embolization (also known as Uterine Fibroid Embolization, UAE or UFE) is a relatively new approach to fibroid intervention that forces fibroids to degenerate by cutting off their blood supply. During the procedure, the patient is under conscious sedation and a slender tube is inserted into the large artery near the groin. The patient is then injected with a dye that shows up on an X-ray machine and helps guide the surgeon. When the catheter is in the uterine artery, the surgeon releases tiny particles called polyvinyl alcohol (PVA). Particles are then guided by the flow of blood and eventually lodge next to the fibroids. The positioning of the particles next to the fibroids slows the flow of blood to the uterus and blocks the fibroids' blood supply. Although UAE has been approved by the Food and Drug Administration (FDA) for the treatment of fibroids, it is still a relatively new and experimental procedure, and the American College of Obstetricians and Gynecologists (ACOG) underscores that more data is needed on the safety and effectiveness of UAE before it can be considered a standard of care.

Surgical Procedures that Remove or Neutralize the Fibroids and Keep the Uterus Intact

a) *Myomectomy* is less destructive than hysterectomy, and far less frequently performed. Myomectomy removes fibroids and leaves the rest of the uterus intact or includes additional surgery to repair the walls of the uterus. There are three different types of myomectomies that surgeons perform for fibroid removal: vaginal myomectomy, laparoscopic myomectomy and abdominal myomectomy. The first, vaginal myomectomy can only be done if the patient has relatively small fibroids inside the cavity of her uterus and is most successful for fibroids that grow on a stalk. Using the hysteroscope the doctor inserts a miniature camera via the patient's vagina; the uterus is then filled with saline solution to expand the walls, and using another tool, the doctor shaves the fibroids away until they're at the same level as the uterus wall. Laparoscopic myomectomy techniques also employ a camera to assist the doctor and operating room staff in the removal of fibroids. A video monitor shows a view of the patient's abdominal region and assists the doctor visually as he or she removes the fibroids in very small pieces usually with the help of a mechanical device called a morcellator, which chops fibroids into "morsels." Lastly, the abdominal myomectomy uses similar techniques as the vaginal and laparoscopic methods but provides the surgeon with a greater field of vision and allows the surgical staff more room to make sure blood vessels have been tied off and surgery is "clean" before surgery is finished.

b) *Myolysis* uses heat in combination with GnRH agonists to shrink fibroids, killing them and their blood supply. Laparoscopic surgical methods enable the doctor to pierce fibroids with a laser or electrified needle. In this procedure the fibroids are not removed, nor is the uterus opened, however the procedure leaves the uterus too weak to carry a developing fetus.

c) *Cryomyolysis* is still a fairly experimental technique that uses GnRH agonist treatment to reduce fibroid size in combination with a needle that freezes rather than burns fibroids, as in myolysis. One insertion of a freezing needle can affect 4 to 6 centimeters at a time, a significantly greater area than can be reached at one time using myolysis. More research is still needed on the long-term effects of cryomyolysis.

Hysterectomy is a procedure which can relieve troubling or disabling fibroid symptoms, yet in the United States is far over-prescribed and should be weighed against other viable and available treatment options. The three most common types of hysterectomies vary in their severity from supracervical hysterectomy which removes only the back portion of the uterus, to total hysterectomy which removes the uterus and the cervix, to total abdominal hysterectomy which removes the uterus, cervix, both ovaries and the fallopian tubes. For more information on hysterectomy please see the hysterectomy fact sheet.

For more information on fibroids, contact NWHN at (202) 628-7814, or at healthquestions@nwhn.org.

References

1. National Institute of Child Health and Human Development (NICHD), Public Information and Communications Branch. "Uterine Fibroids," 2003. http://www.nichd.nih.gov/publications/pubs/fibroids/index.htm.
2. National Institute of Child Health and Human Development (NICHD). "NICHD Study Shows Fibroid Tumors Unlikely To Respond To Conventional Hormone Treatments: Finding Suggests Strategies for New Treatments," October, 2004.
3. National Institute of Child Health and Human Development (NICHD). "Descriptions of Selected Treatments for Women's Health Conditions," January 2005. http://www.nichd.nih.gov/womenshealth/selected_treatments.cfm#ufe.
4. Skilling, Johanna. Fibroids: The Complete Guide to Taking Charge of Your Physical, Emotional, and Sexual Well-Being. New York: Marlow and Company, 2000.
5. Our Bodies Ourselves companion website. Chapter 28: "Unique to Women." Boston Women's Health Collective, 2005. http://www.ourbodiesourselves.org/book/excerpt.asp?id=36.

Updated: 2/06