GUIDE

Uterine Fibroids Information for Patients

The Ottawa Hospital | L'Hôpital d'Ottawa

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What are Fibroids?

Uterine fibroids are benign (non-cancerous) growths that develop in the muscular wall of the uterus. The uterus is a hollow, pear-shaped organ composed primarily of muscular tissue which is located in your pelvis between your bladder and rectum.

Fibroids can cause several problems depending on their size and position. You may hear fibroids referred to by other names, including myoma, leiomyoma, leimyomata and fibromyoma.

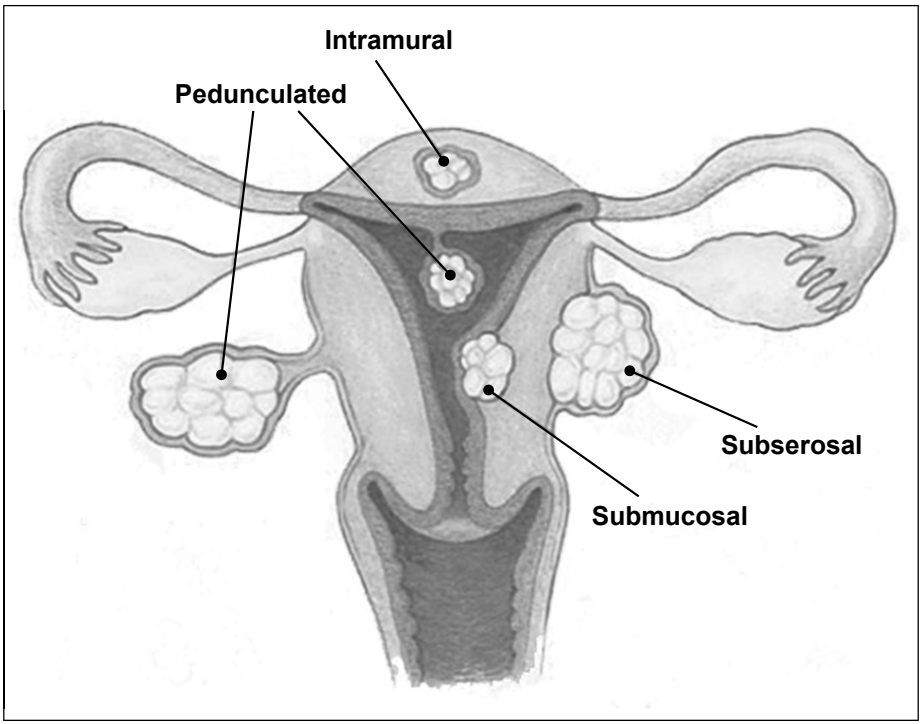
Fibroid Facts

- Women may have one or several fibroids.
- Fibroids range in size from very tiny (size of a cherry) to the size of a grapefruit or much larger.
- Many women have fibroids but are not aware of this as they have no symptoms.
- Some women with fibroids may experience heavy and prolonged bleeding. This is the most common symptom and is usually related to the size and location of the fibroid(s).
- Fibroids grow in response to estrogen, a hormone produced by the ovaries.
- Fibroids usually grow slowly, but the enlarged uterus can press on the bladder and cause urinary frequency and a feeling of pressure on the bladder. In severe cases, you may be unable to urinate and it will be necessary to insert a catheter into the bladder to drain the urine.
- As the uterus enlarges, abdominal distention can occur with increasing abdominal girth and pelvic pressure. The feeling of an abdominal mass may be quite distressing.
- Women with fibroids experience pelvic pain less commonly, but if there is rapid growth of the fibroid there can be acute pain. The fibroid(s) develop so quickly that they outgrow their

blood supply. This occurs mainly during pregnancy with the rapid enlargement of the uterus. This may cause miscarriage or pre-term labour.

- Painful periods (dysmenorrhea) is not usually caused by fibroids, but by an associated condition such as endometriosis (tissue resembling the tissue from the uterine lining, is found outside of the uterus in the pelvic cavity); pelvic infection or adenomyosis (glandular tissue invades the muscular wall of an organ, e.g. uterus).
- Fibroid symptoms often improve after menopause when the production of estrogen decreases and fibroids shrink substantially.
- Post-menopausal women taking estrogen therapy therefore, may continue to have symptoms.

Uterine Fibroids



Types of Uterine Fibroids

Fibroids are described according to their location.

Subserosal fibroids develop around the uterus and expand outward. Approximately 55% of fibroids are subserosal. They typically do not affect a woman's menstrual flow, but can become uncomfortable because of their size and the pressure they cause.

Intramural fibroids develop within the muscular layers of the uterine wall and expand, making the uterus feel larger than normal. They make up about 40% of fibroids. These are the most common fibroids. This can result in heavier menstrual flows and pelvic pressure.

Submucosal fibroids are deep within the uterus, just under the uterine lining and protrude into the uterine cavity. Only 5% of fibroids are submucosal. These are the least common fibroids, but they often cause symptoms, including very heavy and prolonged periods.

Pedunculated fibroids develop a stalk (stem) that grows out from the uterine surface or into the uterine cavity. If these "stalks" twist (occurs rarely) they may cause pain, nausea or fever.

What are Typical Symptoms?

Many women with uterine fibroids have no symptoms. Approximately one third of women with fibroids will experience symptoms. Symptoms are related to the location, size and number of fibroids. They may cause:

- Heavy, prolonged menstrual periods sometimes with clots.
- Anemia (abnormal decrease in the number of red blood cells which causes a decrease in the hemoglobin).

- Pelvic pressure or heaviness.
- Pain in the back or legs.
- Pain during sexual intercourse.
- Bladder pressure leading to a constant urge to urinate
- Abnormally enlarged abdomen.
- Infertility – 3% of infertility is caused by fibroids (recurrent miscarriage).

Who is most likely to have uterine fibroids?

Uterine fibroids are very common, although often they are very small and cause no problems. From 20 to 40 percent of women age 35 and older have uterine fibroids. By age 50, 50% of women have fibroids. Genetics also plays a role, as the incidence of fibroids is increased in women of African descent.

How are uterine fibroids diagnosed?

Fibroids are usually diagnosed during a gynecological examination. Your doctor will conduct a pelvic exam to feel if your uterus is enlarged. The presence of fibroids is most often **confirmed** by an abdominal or vaginal ultrasound.

Ultrasound

Ultrasound uses the echoes from high frequency sound waves to create a picture of the uterus. As fibroids vary in size and location, both trans-vaginal and trans-abdominal ultrasounds may be used to obtain the best views and/or pictures of the fibroids.

Other Diagnostic Tests

Other diagnostic procedures that may be used to determine the presence, location and size of fibroids and to check for other conditions such as ovarian tumors or bowel masses are:

Saline-Infused Sonohysterography (SIS)

Saline-Infused Sonohysterography is a procedure that uses ultrasound to examine the uterine cavity. A speculum is placed into the vagina, then a small amount of sterile fluid is inserted into the uterus through a thin catheter. You may experience mild cramping. SIS improves the physician's ability to identify fibroids that protrude into or distort the uterine cavity.

Hysteroscopy

Diagnostic hysteroscopy is useful to determine the presence of submucosal fibroids. This procedure involves the insertion of a telescope-like instrument called a hysteroscope through the vagina and cervix into the uterine cavity to look for abnormalities within the uterine cavity. This procedure is a "same-day" minor surgery. If a submucosal fibroid is identified it may be removed during the surgery.

Hysterosalpingography

Hysterosalpingography (HSG) is a procedure that produces an x-ray image of the inside of your uterus and determines if the fallopian tubes are open. A fluid that contains iodine is injected through the cervix into the uterus and fallopian tubes, and an x-ray is obtained. Uterine cramping may be experienced. You should inform your doctor if you are sensitive to iodine or shellfish.

Magnetic Resonance Imaging (MRI)

Magnetic resonance imaging (MRI) produces a picture by absorbing energy from specific, high frequency radio waves which can determine if fibroids are present. An MRI is not routinely needed to diagnose fibroids but may help clarify the diagnosis in some circumstances.

Computerized Tomography (CT)

Computerized tomography (CT) is a type of x-ray procedure that uses a computer to construct an image of a body structure such as the uterus. Although rarely needed, this image can determine if fibroids are present.

CT, MRI and ultrasound are painless diagnostic tests.

Treatment Options for Fibroids

Most fibroids do not cause symptoms and do not require treatment. Periodic assessments by your doctor and an ultrasound are generally sufficient to determine whether fibroids are changing in size or if you are developing symptoms that would require treatment. Appropriate treatment depends on the size and location of the fibroids as well as the severity of the symptoms.

Medication is often the first step in the treatment. This might include birth control pills, progestins, Cyklokapron (Tranexamic Acid) or the use of non-steroidal anti-inflammatory drugs (NSAIDS), such as Advil or Naprosyn. These drugs help control abnormal uterine bleeding associated with fibroids but do not affect their size. They may be very helpful. In many patients, symptoms are controlled with these treatments and no other therapy is required.

GnRH Analogs are medicines that are given by injection or nasal spray to temporarily reduce the size of fibroids. They decrease the amount of estrogen the ovaries produce which causes the fibroids to shrink in size. This is only a temporary measure utilized before surgery. When this treatment is discontinued, the fibroids return to their pre-treatment size within three months. GnRH Analogs may produce menopausal-like side effects such as hot flashes, vaginal dryness and mood swings. These medications cannot be used for more than six months as they can cause bone loss.

Iron therapy is prescribed to treat anemia (low hemoglobin). Iron is absorbed better if you take it with Vitamin C, such as an orange or orange juice.

Alternative approaches such as herbal and homeopathic therapies have not been shown to decrease the size of the fibroid or improve symptoms caused by fibroids.

Uterine Artery Embolization (UAE)

This minimally invasive procedure which blocks the main blood supply to the uterus (uterine artery) is performed by a physician called an **Interventional Radiologist**. This physician makes a tiny incision in the groin and passes a small catheter up the femoral artery. When the catheter reaches the uterine artery, tiny PVA (polyvinyl alcohol) particles the size of grains of sand are slowly released into the blood vessels. These particles block the small blood vessels that supply (feed) the fibroids. When the blood supply to the fibroid is cut off, the fibroids will shrink. Women usually experience a decrease in their symptoms with fibroid shrinkage. This same-day procedure is further explained in “The UAE Booklet ”

Myomectomy is a **surgical** procedure that removes visible fibroids from the uterine wall. Myomectomy, like UAE, leaves the uterus in place and may, therefore, preserve the woman's ability to have children. There are several ways to perform a myomectomy, including hysteroscopic myomectomy, laparoscopic myomectomy and abdominal myomectomy.

Hysteroscopic myomectomy is used only for fibroids that are just under the lining of the uterus and that protrude into the uterine cavity (submucosal). There is no need for an abdominal incision. The physician inserts a flexible instrument (hysteroscope) through the vagina and cervix into the uterus and removes the fibroids using special surgical tools fitted to the hysteroscope. This is a day surgery procedure. Complications such as damage or scarring of the uterus and bleeding are rare. Recovery time is approximately one to seven days.

Laparoscopic myomectomy may be used if the fibroid is on the outside of the uterus (subserosal). The physician places a laparoscope (thin, lighted telescope-like viewing instrument) into the abdomen through a small incision near the navel and then uses surgical instruments to remove the fibroids. This approach can only be utilized for smaller fibroids which are easily accessible to this type of surgery. The patient is given a general anesthetic. The average recovery time is about two weeks.

Abdominal myomectomy is a major surgical procedure in which an incision (cut) is made into the abdomen in order to access the uterus, and another incision is made into the uterus to remove the fibroid. The patient is given a "general anesthetic", and will be in the hospital for 3-4 days. Recovery time is 4 – 6 weeks.

While myomectomy is frequently successful in controlling symptoms, it works best for women with **one large fibroid**. If there are several fibroids, the surgery may be less successful.

In addition, other fibroids may grow several years after a myomectomy. The two major risks of a myomectomy are excessive blood loss and adhesions (scar tissue) which may impair future fertility.

Hysterectomy is the surgical removal of the uterus. Approximately one-third of all hysterectomies performed each year are due to uterine fibroids.

There are three ways to perform a hysterectomy: abdominally, vaginally, and laparoscopically. This operation is considered major surgery and is performed while the patient is under general anesthesia. The average recovery period is about six weeks but shorter for the laparoscopic hysterectomy.

Hysterectomy is typically performed for women who have completed childbearing and for women who want definitive treatment or a cure. It is important to discuss with your physician the potential after-effects of a hysterectomy, such as issues relating to sexuality, psychological impact and medical consequences **prior** to the procedure.

Fibroids and Cancer

There is an extremely small chance (1 in 10,000) that fibroids can be cancerous (leiomyosarcoma). Therefore, it is important that you see your physician at regular intervals if you are diagnosed with uterine fibroids to determine whether the fibroids are growing rapidly or if you are developing symptoms that would require treatment. Periodic assessment is especially important if you are planning a pregnancy.

Resources – web sites

- www.womenshealth.gov/a-z-topics/uterine-fibroids
- www.mayoclinic.org/diseases-conditions/uterine-fibroids/home/ovc-20212509