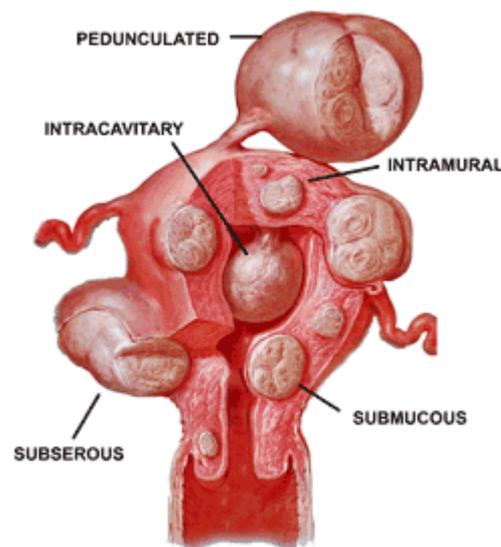


Fibroids

Uterine Fibroids, or uterine **myomas** affect more than 30% of women. The terms *fibroid* and *myoma* are used interchangeably. Most fibroids do not cause symptoms, and do not require treatment, but treatment may be needed in the following circumstances:

1. Fibroids are growing large enough to cause pressure on other organs, such as the bladder
2. Fibroids are growing rapidly
3. Fibroids are causing abnormal bleeding
4. Fibroids are causing problems with fertility



Types of Fibroids

Fibroids are classified by their location (see figure), which will affect both the symptoms they may cause and how they can be treated. Fibroids that are wholly or partially inside the cavity of the uterus, *submucous fibroids*, will usually cause bleeding between periods, heavier periods, and sometimes severe cramping pain. Fortunately, these fibroids can often be easily removed by a method called "*hysteroscopic resection*," which can be done through the cervix without the need for an incision.

Intramural fibroids are in the wall of the uterus, and can range in size from microscopic to larger than a grapefruit. Many of these do not cause problems unless they become quite large. There are a number of alternatives for treating these, but often they do not need any treatment at all but when that is the case this may involve, laparoscopy, or laparotomy or a novel technique such as uterine artery embolisation.

Subserous fibroids are on the outside wall of the uterus, and may even be connected to the uterus by a stalk (*pedunculated fibroid*.) These do not need treatment unless they grow large, but those on a stalk can twist and cause pain. This type of fibroid may be easiest to remove by *laparoscopy*.

Diagnosis of Fibroids

Fibroids may be felt during a pelvic exam, but many times fibroids that are causing symptoms may be missed if the examiner relies just on the examination. Also, other conditions such as *adenomyosis* or ovarian cysts may be mistaken for fibroids. For this reason, I routinely advise an ultrasound examination at the time of the first visit when a woman has symptoms of abnormal bleeding or cramping, or if I feel an abnormality on examination.

Ultrasound imaging with a vaginal or abdominal approach only takes a few minutes to do, is not uncomfortable, and rapidly provides invaluable information such as the size and site of fibroids and reduces the likelihood of other abnormalities which may be confused with, or obscured, by fibroids.

In some instances a *hysteroscopy* will be helpful in deciding whether indeed part of a fibroid is in the uterine cavity, whether it is amenable to resection, and excludes other causes of menstrual problems. Hysteroscopy is usually a quick, out-patient, procedure that allows direct examination of the cavity of the womb.

MRI scans also provide an excellent picture of the uterus. Usually the cost of the exam is not justified, as all of the information needed to plan treatment (or not to treat) can be obtained by the methods above.

Treatment of Fibroids

The most important question to ask is “do the fibroids need to be treated at all”? The vast majority of fibroids grow as a woman gets older, and tend to shrink after the menopause. Obviously fibroids that are causing significant symptoms need treatment. While it is often easier to treat smaller fibroids than larger ones, most of the small ones will never need to be treated. The location of the fibroids plays a strong influence on how to approach them.

Medical Treatment:

There are no current medicines available that will permanently shrink fibroids. Often heavy bleeding can be decreased with the combined contraceptive pill but in some cases that may stimulate growth of the fibroids. A GnRH agonist will induce a temporary chemical menopause and in the absence of oestrogen fibroids usually decrease in size. Unfortunately, the effect is temporary, and the fibroids rapidly go back to their pre-treatment size when the medication is discontinued. Usually we would have reservations about continuing such treatment beyond 6 months but this may be a useful manoeuvre in women in the peri-menopausal years. Mifepristone, which works against the effects of progesterone, may cause a significant decrease in the size of fibroids, and often stops abnormal uterine bleeding, but its use in this setting is still rather experimental.

Surgical treatment of fibroids:

There have been a number of procedures recently promoted for treatment of fibroids which may prove, over time, to be major advances; but we may look back on others as not so wonderful. With any new procedure, it is important to look at studies published in peer-reviewed medical journals as well as promotional materials by a

physician, clinic, or instrument manufacturer. We need to be as certain as we can about how many of these procedures have been done in published studies; what is the outcome and in which groups of patients and for how long have these patients been followed?

Intracavitary Fibroids

When a fibroid is inside the uterine cavity, it will almost always cause abnormal bleeding and cramping. If it is not currently causing problems, the odds are very high that it will. For this reason, I usually recommend that they be removed. These can usually be removed by using a special kind of *hysteroscope* that is a *resectoscope*. The resectoscope is a telescope with a built-in loop that can cut through tissue. It has been used for years to treat enlargement of the male prostate gland, and has more recently been used inside the uterus. This is called *hysteroscopic resection* of the fibroid and involves a day-case admission and a general anaesthetic.

Submucous Fibroids

Unlike intracavitary fibroids, some of the fibroid is also in the wall of the uterus. Submucous fibroids often cause abnormal bleeding. Many of these can also be treated by hysteroscopic resection. During the process of removing submucous fibroids by this method the uterus contracts, and tends to push the portion of the fibroid that is in the wall into the cavity of the uterus. An experienced hysteroscopic surgeon should make the decision on which fibroids should be treated by this method. If heavy bleeding is the main reason for desiring treatment, and fertility is no longer desired, an *endometrial ablation* might also be done at the same time. For particularly large submucous fibroids two separate procedures may be needed.

The risk with the procedure is a 1% chance of uterine perforation and a small chance of haemorrhage and fluid absorption which may require overnight admission to hospital.

Intramural and Pedunculated Fibroids

Fibroids that are in the wall of the uterus or on the outside of the uterus are not accessible to treatment through the cervix. If these need to be treated, there are essentially three types of procedures: remove the fibroid(s), destroy the fibroid(s), or remove the uterus. All of the surgical options available are variations on one of these themes. Some have been available for years. Others are very new and have had very little or no long term testing.

Hysterectomy:

Hysterectomy is the only procedure that comes with a guarantee: no more bleeding and no re-growth of fibroids. Like any alternative, there are advantages and disadvantages of having a hysterectomy. The procedure may be accomplished either through an abdominal incision or by a vaginal approach.

Removal of the fibroid(s):

This is also called *myomectomy*. Myomectomy, with one exception, means making an incision into the uterus and removing one or more fibroids. If the fibroid is on a

stalk (pedunculated) it is not necessary to cut into the uterus to cut the stalk. Unless the fibroid is on the outside surface of the uterus, the uterus is repaired, usually with sutures. One of the major differences in how a myomectomy is done involves the surgical approach to the uterus. In a *laparotomy* an incision is made in the abdomen to reach the uterus. The advantage of this is that large fibroids can be quickly removed. The surgeon is able to feel the uterus, which is helpful in locating fibroids that may be deep in the uterine wall. The ability to touch the uterus facilitates repairing the uterus. The disadvantage of a laparotomy is that it requires an abdominal incision. Most of my patients who have this procedure spend three nights in the hospital, and return to work in about four to six weeks.

The particular disadvantage of this procedure is the risk of bleeding and of blood transfusion. There is also a risk of adhesions forming after the operation, which might cause pelvic pain in the long term or might impair fertility. There are precautions, which a surgeon should take to reduce all these hazards.

Some fibroids can also be removed by *laparoscopy*. The laparoscope is a telescope placed in the abdomen through the belly button. Other instruments are inserted through small individual incisions in the abdominal wall. Many fibroids can be removed by laparoscopy; this is easier to do when the fibroids are on a stalk or close to the surface. Once the fibroids are removed they are cut into pieces by one of several instruments designed for this purpose, and removed. The advantage of laparoscopic myomectomy is that it is usually done as a day case procedure, and allows faster recovery than a laparotomy. It might also be less likely to cause adhesions subsequently. One of the disadvantages is the extended time needed to remove large fibroids from the abdomen, although newer instruments are improving this. Since the surgeon cannot actually touch the uterus, it may be more difficult to detect and remove smaller fibroids. In addition, if a woman plans pregnancy after her myomectomy, there is a question of whether the uterus can be repaired through the laparoscope as well as it can be by laparotomy. Thus there is evidence, which suggests that the risk of the uterus rupturing in labour is higher after a laparoscopic treatment.

Generally we would quote a 20% risk that after myomectomy a patient will return in later years for further surgery for fibroids.

Uterine artery embolisation (UAE):

This is the newest treatment for fibroids. This procedure involves placing a small catheter into an artery in the groin and directing it to the blood supply of the fibroids. Little plugs are injected through the catheter to block these arteries. This causes the fibroids to shrink, although there may be severe pain for a short time afterwards requiring the use of narcotics.

A patient will usually be admitted for 24-48 hours for this procedure and will need the following week off work. The fibroids will continue to shrink over a year or more. This treatment is not so effective for single very large fibroids, or for fibroids where the greater portion is in the uterine cavity or in the peritoneal cavity, a situation associated with a high risk of infection. It is also probably the case that UAE is best for treating heavy periods more than pressure symptoms.

There is, it appears, a 1% or so chance that UAE might cause the ovaries to fail prematurely.

Uterine artery embolisation may eliminate the need for surgical treatment of fibroids. No samples are sent for examination in the laboratory, although the chance of malignancy in fibroids is low.

This text is not intended as a fully comprehensive text on the management of fibroids but rather is intended to accompany your discussion with Mr Hackett. When a decision is being made about the type of treatment a patient will undergo more detailed discussion on the benefits, and risks of the procedure will take place.

- Nov 08 -