

Fibroids

Fibroids are benign (noncancerous) growths in the uterus (womb). They are common and usually cause no symptoms. However, they can cause heavy periods and other symptoms, including abdominal swelling and urinary problems. Treatment with medication or surgery are options if symptoms occur.

What are fibroids?

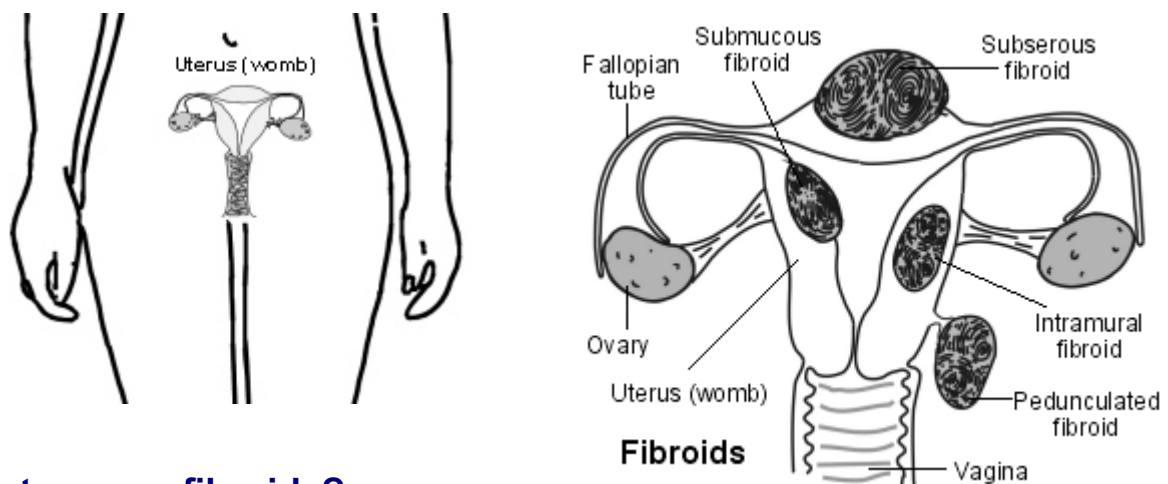
A fibroid is a benign (noncancerous) growth of the uterus (womb). They are also called uterine myomas, fibromyomas or leiomyomas. They can vary from pea-sized to the size of a melon. Fibroids can increase in size, decrease in size or even go away with time. They can occur anywhere in the uterus and are named differently depending upon where they grow:

- **Intramural fibroids** grow within the muscle tissue of the uterus. This is the most common place for fibroids to form.
- **Subserous fibroids** grow from the outside wall of the uterus into the pelvis.
- **Submucous fibroids** grow from the inner wall into the middle of the uterus.
- **Pedunculated fibroids** grow from the outside wall of the uterus and are attached to the uterus by a narrow stalk.

How common are fibroids?

They are common. At least 1 in 4 women develops one or more fibroids in her lifetime. They usually develop in women aged 30-50 and can sometimes run in families. It is common to have several of various sizes, although some women just have one. Fibroids are more common in women from Afro-Caribbean origin. They also tend to be larger, occur at an earlier age and are more likely to cause symptoms in Afro-Caribbean women.

Fibroids are also more common in women who weigh over 70 kg (11 stones). This is thought to be due to the higher levels of oestrogen that occur in women with a higher proportion of body fat.



What causes fibroids?

A fibroid is like an overgrowth of smooth muscle cells. (The uterus is mainly made of smooth muscle.) It is not clear why they develop. Like the uterus, fibroids are sensitive to oestrogen, the hormone that is made in the ovary. Fibroids tend to swell when levels of oestrogen are high - for example, during pregnancy. They also shrink when oestrogen levels are low - for example, after the menopause. This shrinkage of the fibroids after your menopause may be delayed if you take hormone replacement therapy (HRT).

What symptoms and problems are caused by fibroids?

Symptoms only occur in about 1 in 3 women with fibroids. Many women who have fibroids are not aware that they have them. Sometimes one is found during a routine examination by a doctor or by chance during a scan which you may have for another reason. Symptoms may include:

Heavy or more painful periods

Fibroids do not disturb the menstrual cycle but bleeding is often heavier than usual, sometimes with more pain. This can lead to low iron levels and to anaemia which will be diagnosed by a blood test. This is easily treated with iron tablets.

Bloating or swelling

If a fibroid is large you may have discomfort or swelling in the lower abdomen. Some women experience lower back pain due to their fibroids.

Bladder or bowel symptoms

Occasionally, a fibroid may press on the bladder which lies in front of the uterus. You may then pass urine more often than usual. Rarely, pressure on the rectum (which lies behind the uterus) may cause constipation.

Pain during sexual intercourse

If the fibroids grow near to the vagina or cervix (neck of the womb) then this can cause pain or discomfort during sexual intercourse (dyspareunia).

Miscarriage or infertility

If the fibroids grow into the cavity of the uterus they can sometimes block the Fallopian tubes, leading to problems with infertility. This is not common though. Very rarely, fibroids can be a cause of repeated miscarriages.

Problems during pregnancy

Having one or more fibroids does not cause any problems in the vast majority of women when they are pregnant. Occasionally, you may have pain from your fibroid. This may be caused by the fibroid growing too large for its blood supply or the fibroid twisting if it is pedunculated.

However, fibroids can be associated with an increased risk of having a Caesarean section, the baby lying breech (rather than head first) and early labour. Your doctor will advise you further if you are pregnant and have fibroids.

How are fibroids diagnosed?

Some fibroids can be felt during an internal (vaginal) examination by a doctor. Sometimes an ultrasound scan or other tests are done to confirm the diagnosis and to rule out other causes of any symptoms.

What are the treatment options for fibroids?

Observation

If your fibroids are not causing any symptoms then treatment is not usually needed. Many women choose not to have treatment if they have symptoms that are not too bad. After the menopause, fibroids often shrink and symptoms tend to go or ease. You can change your mind and consider treatment if symptoms get worse. Your doctor may advise you to have a repeat scan to assess the growth and size of your fibroids.

Treatment with medication

There are currently no medicines that will cure fibroids. Medication can be used to improve symptoms or to shrink the fibroids.

Medication to improve symptoms

The following medicines are used to treat heavy periods whatever the cause, including heavy periods caused by fibroids. They may not work so well if your fibroids are large. However, they may be worth a try if your periods are heavy and the fibroids are small:

- **Tranexamic acid** is taken 3-4 times a day, for the duration of each period. It works by reducing the breakdown of blood clots in the uterus.
- **Anti-inflammatory medicines** such as ibuprofen and mefenamic acid. These also help to ease period pain. They are taken for a few days at the time of your period. They work by reducing the high level of prostaglandin in the uterus lining. Prostaglandin is a chemical which seems to contribute to heavy periods.
- **The contraceptive pill** may help you to have lighter periods and can often help with period pain too.
- **Levonorgestrel intrauterine system (LNG-IUS)** is similar to an intrauterine device used for contraception. It is inserted into the uterus and slowly releases a regular small amount of progestogen hormone called levonorgestrel. It works by making the lining of the uterus very thin so bleeding is lighter. However, it can sometimes be difficult to insert into the womb in women with fibroids.

Medication to shrink the fibroids

Some women are given a gonadotrophin-releasing hormone (GnRH) analogue. This is a hormone medicine that causes you to have a very low level of oestrogen in your body. Fibroids shrink if the level of oestrogen falls. This can ease heavy periods and pressure symptoms due to fibroids. However, a low oestrogen level can cause symptoms similar to going through the menopause (hot flushes, etc). It may also increase the risk of osteoporosis. Therefore, this treatment is given for a maximum of six months.

GnRH analogues, such as goserelin (eg Zoladex®) or leuprorelin acetate (eg Prostag® SR), are often prescribed for three to four months before having an operation, which will make it easier to remove fibroids. Sometimes a low dose of HRT is also given to reduce the incidence of menopausal side-effects.

A new medication treatment undergoing trials

A medicine called ulipristal acetate (UPA) has shown promise in preliminary research trials. This is currently used as an emergency contraceptive. It works by blocking the effects of the hormone progestogen. Progestogen is thought to play a role in fibroid development and so it was thought that this medicine may help to shrink fibroids. A small research trial has concluded that it does seem to have an effect on shrinking fibroids, with side-effects not being too troublesome. Further larger clinical trials are needed to establish whether this is indeed a good treatment option.

Surgery and other operative treatments

There are now several different operations available to remove and treat fibroids.

Hysterectomy

This is the traditional and most common treatment for fibroids which cause symptoms. Hysterectomy is the removal of the uterus (womb). This can be done by making a bikini scar in the lower abdomen. Or, if the fibroids are small enough, the uterus can be removed through the vagina so there are no scars. A hysterectomy may be a good option for women who have completed their family. See separate leaflet called '*Hysterectomy*' for more detail.

Myomectomy

This is a possible alternative, especially in women who may wish to have children in the future. In this operation, the fibroids are removed and the uterus is left. This procedure is not always possible. This operation can be done through an incision (cut) in the abdomen, via keyhole surgery (laparoscopically) or through the vagina (hysteroscopically). The type of operation depends on the size, number and position of the fibroids. Recurrence of the fibroid is fairly common after a myomectomy.

Endometrial ablation

This procedure involves removing the lining of the womb. This can be done by different methods. For example, using laser energy, a heated wire loop or by microwave heating. This method is usually only recommended for fibroids close to the inner lining of the womb.

Uterine artery embolisation

This procedure is performed by a specially trained radiologist (X-ray doctor) rather than a surgeon. It involves putting a catheter (a thin flexible tube) into an artery (blood vessel) in the leg. It is guided, using X-ray pictures, to an artery in the uterus that supplies the fibroid. Once there, a substance that blocks the artery is injected through the catheter. As the artery supplying the fibroid become blocked it means the fibroid then loses its blood supply and so the fibroid shrinks. The complete process of fibroid shrinkage takes about 6-9 months. However, most women notice a considerable improvement in their symptoms within three months. There is a good chance of success with this procedure but it does not work in every case.

Other techniques

Magnetic resonance imaging (MRI): MRI-guided laser ablation and MRI-guided focused ultrasound are newer techniques. In these procedures, small needles are put through the skin into the centre of the fibroid. The correct position of the needles is shown by the MRI scan. The laser energy or ultrasound energy is then passed down the needles, which destroys the fibroid. These techniques are not suitable for all types of fibroid. Also, there is still some uncertainty as to the benefits and risks of both these treatments.

Further information

Women's Health Concern

Web: www.womens-health-concern.org

Provides information on gynaecological and sexual health issues, including fibroids.

British Fibroid Trust

Web: www.britishfibroidtrust.org.uk

Offers information and a forum for exchanging information. Campaigns for more research.

Fibroids Embolisation Website

Web: www.fibroids.co.uk

Provides information on fibroids, together with a synopsis of the various forms of treatment, in particular uterine artery embolisation. Written by a UK doctor.

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- [New non-surgical treatment for uterine fibroids can improve quality of life and maintain fertility](#). Press release from European Society of Human Reproduction and Embryology. June 2010

Comprehensive patient resources are available at www.patient.co.uk

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