What are fibroids?
Fibroids are benign (non-cancerous) growths that develop in the muscle tissue of the uterus (womb). They are also called myomas and leiomyomas. Fibroids are very common and it is estimated that more than 40% of women can have them. It is unknown why fibroids develop. They can occur at any age but are more common in women in their 30s and 40s. Fibroids are sensitive to the hormones estrogen and progesterone and they are more common in Afro-Caribbean women who are also more likely to have multiple fibroids compared with Caucasian women.

Fibroids vary in size. Some are as small as a pea and others can be as large as a melon. They can occur anywhere in the womb and are named according to their location.

- **Intramyometrial** – grow inside the muscle layer of the uterus and are the most common
- **Submucosal** – grow from the inner lining of the uterus into the uterine cavity
- **Subserous** – grow from the outer surface of the uterus into pelvic cavity
- **Pedunculated** – grow from the outer surface of uterus and are attached to the uterus by a narrow stalk.

What symptoms do fibroids cause?
Fibroids may not cause any symptoms and may remain undetected. When present, symptoms vary depending on number of fibroids, their size and location. Following symptoms may be caused by fibroids:

**Menstrual problems**
Fibroids may cause heavy periods which can then cause anaemia. They can also result in more prolonged, irregular periods and may be associated with menstrual cramps. Menstrual problems are generally related to the location and size of the fibroids and are commonly associated with submucosal and intramyometriall fibroids that are compressing or distorting the lining of the uterus and may enlarge the cavity of the uterus.

**Pressure symptoms**
Large fibroids may result in abdominal swelling and can cause urinary or bowel problems from compression on these organs.

**Infertility**
Fibroids can also present with infertility. This again is related to the location and size of the fibroids and is commonly associated with submucosal and intramyometrial fibroids that are compressing the lining of the uterus.

**Problems during pregnancy**
Very large fibroids especially submucosal fibroids are known to be associated with a higher rate of miscarriage, and preterm delivery. Some large fibroid may cause problems during delivery.

Women with fibroids can present with a combination of these symptoms or may experience no symptoms and only have their fibroids noted during a clinical examination or assessment.
How do you diagnose fibroids?
Fibroids may be suspected during a pelvic examination by identifying a pelvic swelling and enlargement of the womb.

Ultrasound scan
Diagnosis of fibroids is usually confirmed by an ultrasound scan examination of the pelvis. This would also allow assessment of the number of fibroids present in the uterus, their size and location.

Magnetic resonance imaging (MRI)
MRI may occasionally be used to diagnose fibroids. This is not commonly used in this context but may be helpful in cases where the diagnosis is unclear or if there is a suspicion about the diagnosis or appearance of the fibroids.

Hysteroscopy
This is a surgical procedure where a telescope is inserted into the cavity of the uterus. This would allow assessment of the location of the fibroids in relation the uterine cavity. It is also commonly used to surgically remove submucosal fibroids that are causing symptoms.

Do fibroids always need to be treated?
Treatment is generally indicated for symptom control. Some large fibroids may need removal to avoid pressure symptoms. Small fibroids that are not causing symptoms usually do not require treatment.

How are fibroids treated?
Treatment would generally depend on the symptoms, your circumstances and your choice.

Treatment of fibroids causing menstrual problems
Treatment may include the following options:

1. Medical non-hormonal treatment
   Tranexamic acid: It is a medication that can be taken for the duration of the menstrual period to reduce the amount of bleeding and works by reducing the breakdown of blood clots in the womb.
   Mefenamic acid: It is from a group of medicines called non-steroidal anti-inflammatory drugs (NSAID). It can be taken for the duration of the menstrual period to reduce the amount of bleeding and pain associated with the periods. It works by reducing the levels of the chemical prostaglandin in the lining of the womb and as a result reduces the amount of blood loss and pain associated with the periods.

2. Medical hormonal treatment
   The combined oral contraceptive pill: This contains the hormones estrogen and progesterone and often reduces the amount of menstrual blood loss by suppressing ovulation. It can be considered as an option in treating heavy menstrual blood loss in women with fibroids.
   The levonorgestrel releasing intrauterine system: This device releases levonorgestrel (progestogen hormone) into the cavity of the womb and reduces menstrual blood loss by thinning the lining of the womb. It can be considered as an option in treating heavy menstrual blood loss in women with fibroids but would not be suitable for women with large fibroids that are distorting the shape of the uterine cavity.
   Gonadotrophin releasing hormone (GNRH) agonists: These are given in the form of injections and can help shrink fibroid size by switching off ovulation and lowering the levels of the hormone estrogen. They can reduce the heavy menstrual blood loss in women with fibroids but can only be used for a limited period of time (generally up to 6 months) in premenopausal women as it may increase the risk of thinning of the bones (osteoporosis) and therefore its use in clinical practice is limited to use for reduction of fibroid size before surgery.
Fibroids

Fibroids

Ulipristal acetate: This is a new medical treatment which can help by reducing size of fibroids. It works by blocking the effect of the hormone progesterone, which is thought to play a role in fibroid development. The treatment involves taking one tablet a day. The treatment is initially given daily for 3 months and sometimes prior to surgical removal of the fibroid. If continuing with medical rather than surgical treatment, the 3 month cycle can be repeated for up to 4 cycles. This however, may be associated with liver toxicity and liver function monitoring is required in women taking this medication.

Medical treatment of fibroids is generally more effective in women with small fibroids and is less likely to be successful in women with multiple or large fibroids.

3. Surgical treatment

Myomectomy: This entails surgical removal of the fibroids and can be carried out through a cut in the abdomen, open procedure or keyhole (laparoscopic) to remove the fibroids. Alternatively, this can be carried out through the vagina using a telescope (hysteroscopy) if the fibroids are located in the uterine cavity.

Hysterectomy (removal of the uterus): This may be considered in women who have completed their family when other treatment options have been unsuccessful. The procedure can be carried out through a cut in the abdomen as an open procedure or keyhole (laparoscopic) although the latter approach would not be suitable if the uterus is significantly enlarged with multiple fibroids.

Uterine artery embolization (UAE): In this procedure small particles are injected into the blood vessels that supply the uterus. This results in blockage of the blood supply to the fibroids and shrinkage in the size of the fibroids. This is a treatment option for women who wish to conserve their uterus and retain fertility. Successful pregnancies have been reported following this treatment. You should seek specialist advice on how this treatment may affect future pregnancy plan.

MRI-guided focused ultrasound: This treatment sends pulses of high power ultrasound through the skin of lower abdomen. It is targeted at fibroids using MRI scanner. It is known to be effective but evidence of benefit for women trying to conceive is not yet available.

What effect would the menopause and HRT have on fibroids?

Fibroids often shrink in size after the menopause as a result of the fall in the levels of estrogen hormone after the menopause. This reduction in size is likely to be smaller in women receiving HRT as fibroids would be sensitive to the replaced hormones (estrogen and progesterone). However, this effect is unlikely to be significant as the level of hormones supplied through HRT is less than that in natural cycles and having fibroids would not be a contraindication to receiving or continuing with HRT.

Useful contacts

British Fibroid Trust
www.britishfibroidtrust.org.uk

Fibroid Relief
www.fibroidrelief.org