

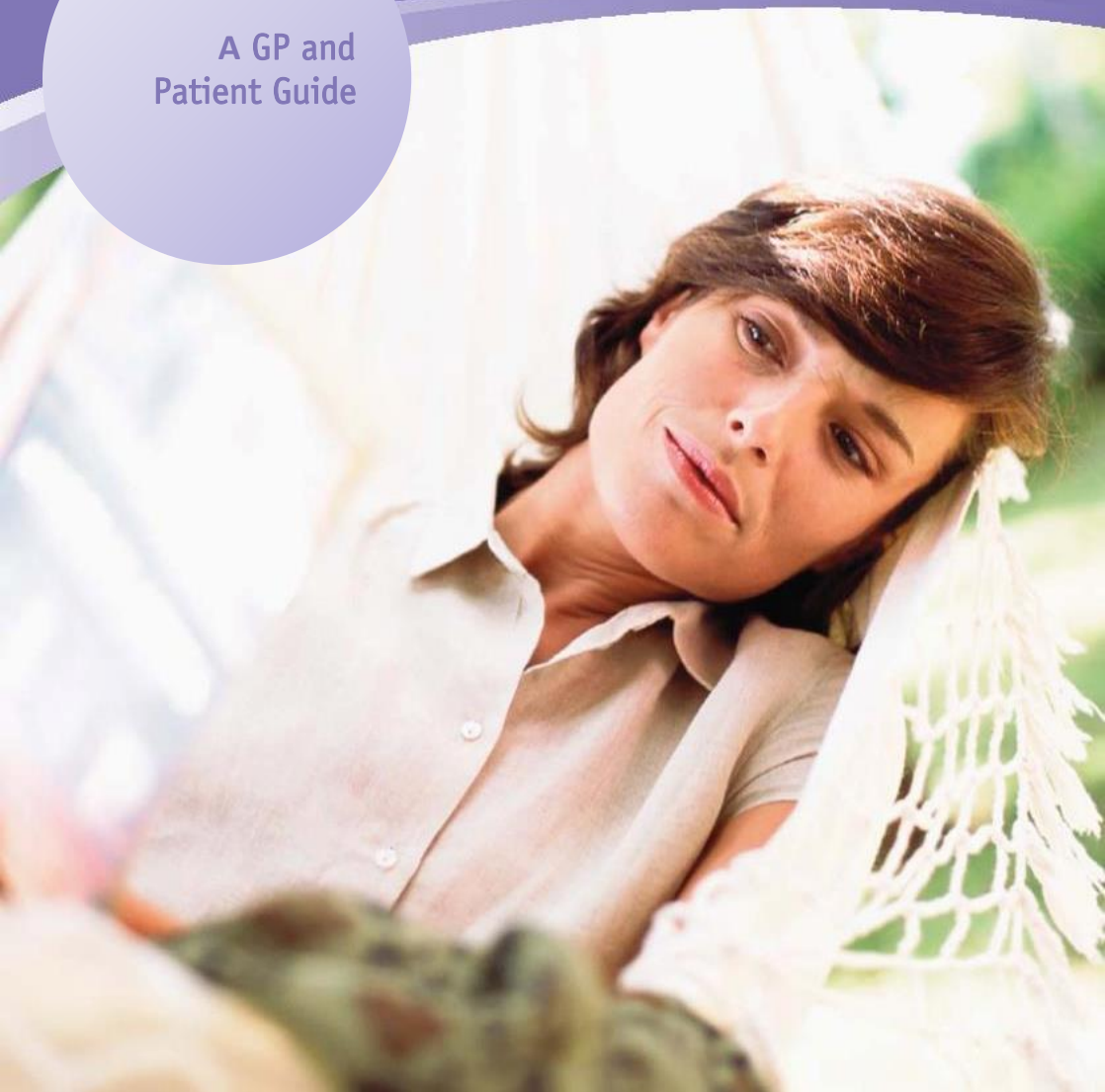
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# Spectrum

Interventional Radiology

A GP and  
Patient Guide



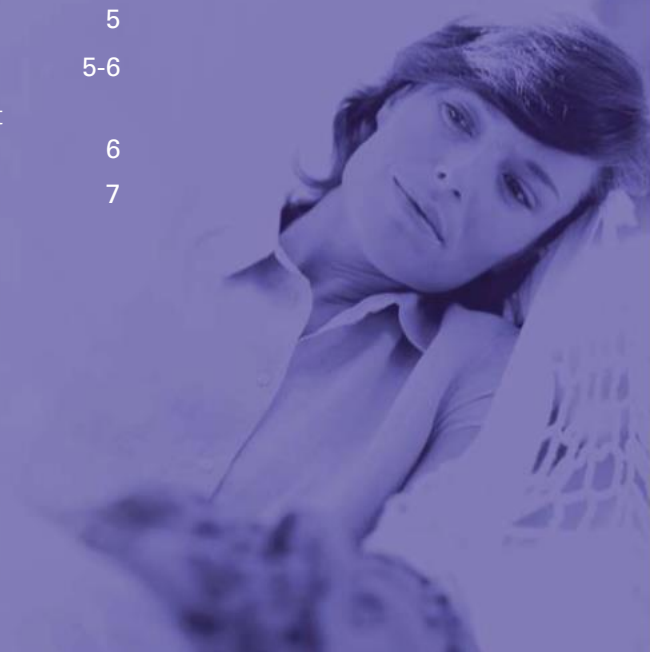


Uterine fibroids are very common and, for many women, cause symptoms that affect the quality of their life.

This pamphlet provides some answers to questions that patients and their families may have about uterine fibroids and the treatments that are available.

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## What are uterine fibroids?

Uterine fibroids are benign (non-cancerous) tumours of the uterus. They are clinically apparent in up to 25%<sup>1</sup> of women and, with newer imaging techniques, the true clinical prevalence<sup>2</sup> may be higher (up to 77%). Although most do not cause symptoms, uterine fibroids can cause severe problems for some women who have the condition.

Uterine fibroids can grow in various parts of the uterus.

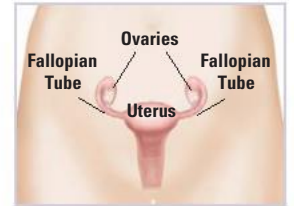
- Those that grow in the muscular wall of the uterus are called **intramural fibroids**.
- Those that grow on the outer surface of the uterus are called **subserosal fibroids**.
- Those that grow on the inner surface of the uterus are called **submucosal fibroids**.

Intramural fibroids are most common. Because these fibroids grow in the muscular wall of the uterus, they make it feel larger than normal and can cause an increase in menstrual bleeding, pelvic pain, back pain or pressure.

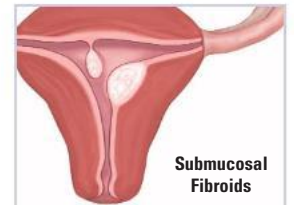
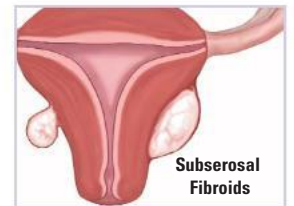
Subserosal fibroids are the second most common. Because these are located on the outer wall of the uterus, they do not usually affect menstrual flow. However, they can cause pelvic pain, back pain or pressure.

Submucosal fibroids can cause heavy or prolonged periods, even if they are very small.

Typically, women who have uterine fibroids have more than one fibroid and they can vary widely in size. Some are no bigger than a pea while others can grow to the size of a melon or larger. When fibroids are diagnosed, the extent of the disease is determined by comparing the size of the uterus to a typical size during pregnancy. For example, a large fibroid or multiple fibroids may enlarge the uterus to the same size as a six or seven month pregnancy.



The uterus is part of the female reproductive system located in the pelvis. The uterus, or womb, is a muscular organ that receives the fertilised egg and provides the environment needed for growth of a foetus.





## What causes uterine fibroids?

The exact reason why uterine fibroids develop is unknown. However, medical researchers have associated the condition with two factors – genetics and hormones.

### Genetics

There is a strong genetic component to fibroid development, which causes fibroids to occur at least three times more frequently among black women<sup>3</sup>.

### Hormones

Uterine fibroids can dramatically increase in size during pregnancy. It is thought that this effect is due to the increase in the amount of oestrogen – the female hormone – that naturally occurs during pregnancy. After delivery, the fibroids usually shrink to the size they were before the pregnancy.

During menopause oestrogen levels dramatically decrease. This causes uterine fibroids to shrink, relieving symptoms. However, if a woman takes hormone replacement therapy (HRT) during menopause, oestrogen levels do not decrease, the fibroids may not shrink and the symptoms may remain.

## What are typical symptoms?

A uterine fibroid may begin to grow when a woman is in her 20s. However, most women do not begin to have symptoms until they are in their late 30s or early 40s. Depending on the location, size and number of fibroids, a woman with uterine fibroids may experience the following symptoms:

- Heavy, prolonged menstrual periods and unusual monthly bleeding – sometimes with clots – which can cause anaemia
- Increased menstrual cramping
- Pain, pressure or discomfort in the pelvis
- Pain in the back, sides or legs
- Pain during sexual intercourse
- Blockage of urine flow from the kidney to the bladder
- Urinary frequency due to pressure on the bladder
- Constipation and/or bloating due to pressure on the bowel
- Abnormally enlarged abdomen

## How do I know if I have uterine fibroids?

Uterine fibroids are usually first diagnosed during a gynaecologic internal examination. This pelvic examination allows the physician to check the size of your uterus. If it feels enlarged your physician may send you for an ultrasound examination which can detect if fibroids are present, as well as determine their precise location and size.

The presence of fibroids can also be diagnosed using magnetic resonance imaging (MRI) or computed tomography (CT). In cases of submucosal fibroids, your gynaecologist may use a small scope placed through your vagina to examine the inside wall of your uterus.

## How are uterine fibroids treated?

The treatment for uterine fibroids depends on the size and location of the fibroids and the severity of your symptoms. If you do not have symptoms, your doctor may decide that there is no need to treat the fibroids. However, your physician will probably recommend yearly visits to have them checked.

If you do develop symptoms there are a number of treatment options available including:

- Medical therapy
- Surgical therapy
- Non-surgical therapy (uterine fibroid embolisation)

### Medical Therapy

Medical therapy for uterine fibroids may include the use of drugs to control of symptoms. These drugs include non-steroidal anti-inflammatory drugs (NSAIDs), birth control pills and hormone therapy.

### Surgical Therapy

There are two surgical options for uterine fibroids – myomectomy and hysterectomy. A myomectomy is a surgical technique which removes the fibroids from the wall of the uterus. A hysterectomy is a surgical procedure which removes the entire uterus.

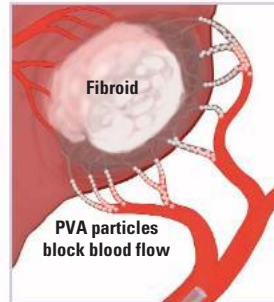


## How are uterine fibroids treated? (continued)

### Non-Surgical Therapy

Uterine fibroid embolisation (UFE) – also known as uterine artery embolisation (UAE) – is a less invasive approach that is designed to preserve your uterus. It is performed by a specially trained physician – an interventional radiologist – in many hospitals and medical centres.

During UFE, a catheter is inserted into a blood vessel in your groin. The physician then threads the catheter up to your uterine artery and injects small particles. These particles flow into the branches of the uterine artery, blocking the vessel and preventing blood from reaching the fibroid. Over time, your fibroids shrink, relieving your symptoms.



## How do I decide which treatment is best for me?

It is important that you understand all the treatments that are available to you. Therefore, you should have a detailed discussion with your physician about your options, including benefits and potential risks. Only you and your physician can decide which choice is best for you.

## Commonly used terms

### Catheter

A small flexible tube.

### Fibroid

A benign (non-cancerous) tumour in the uterus.

### Hysterectomy

A surgical procedure that removes the entire uterus.

### Interventional Radiologist

A specially-trained physician who uses x-ray imaging to guide procedures.

### Intramural Fibroids

The most common type of uterine fibroid. These fibroids grow in the muscular wall of the uterus.

### Menopause

The cessation of menstrual periods.

### Myomectomy

A surgical procedure that removes fibroids from the wall of the uterus.

### NSAIDs

Non-steroidal anti-inflammatory drugs often used for pain control.

### Oestrogen

The female hormone.

### Submucosal Fibroids

Fibroids that develop just under the inner surface of the uterus.

### Subserosal Fibroids

The second most common type of uterine fibroid. These fibroids develop at the outer surface of the uterus and expand outward.

### Uterine Artery

The blood vessel that supplies the fibroid with the oxygen and nutrients required for growth.

### Uterine Fibroid Embolisation

Injection of particles to block the flow of blood to a fibroid.

### Uterus

The womb.

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3. LM Marshall, D Spiegelman and RL Barbieri et al., Variation in the incidence of uterine leiomyoma among premenopausal women by age and race, *Obstet Gynecol* **90** (1997), pp. 967–973.

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