

## FREQUENTLY ASKED QUESTIONS (FAQs)

# 1

### What causes uterine fibroids?

The exact reason why uterine fibroids develop is unknown. However, medical researchers have associated the condition with several factors – e.g. age, genetics and hormones.<sup>2</sup> There is a strong **genetic component** to fibroid development, which causes fibroids to occur at least three times more frequently among black women.<sup>2</sup> 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.<sup>2</sup> 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.

# 2

### 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.

# 3

### Does embolisation of uterine fibroids affect my ability to get pregnant?

Because of the exceptional risk of early menopause related to embolisation, the procedure is not recommended in the case of patients who have a strong desire for pregnancy and where there is a surgical possibility to preserve the uterus (myomectomy). However, cases of pregnancy have been reported after embolisation. Embolisation is the recognised alternative to a hysterectomy for women who wish to retain their uterus.

#### References

1. Alexander Stephan Boosz, Peter Reimer, Matthias Matzko, Thomas Römer, Andreas Müller et al. The Conservative and Interventional Treatment of Fibroids Dtsch Arztebl Int 2014; 111: 877–83.
2. EA Stewart, CL Cookson, RA Gandolfo, R Schulze-Rath et al. Epidemiology of uterine fibroids: a systematic review BJOG: An International Journal of Obstetrics & Gynaecology Volume 124, Issue 10, September 2017, Pages: 1501–1512.
3. Bae SH, Kim MD, Kim GM et al. Uterine Artery Embolization for Adenomyosis: Percentage of Necrosis Predicts Midterm Clinical Recurrence. J Vasc Interv Radiol. Sep;26(9):1290-6 2015.

# Uterine Fibroids

A Patient Guide on Treatment Options



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

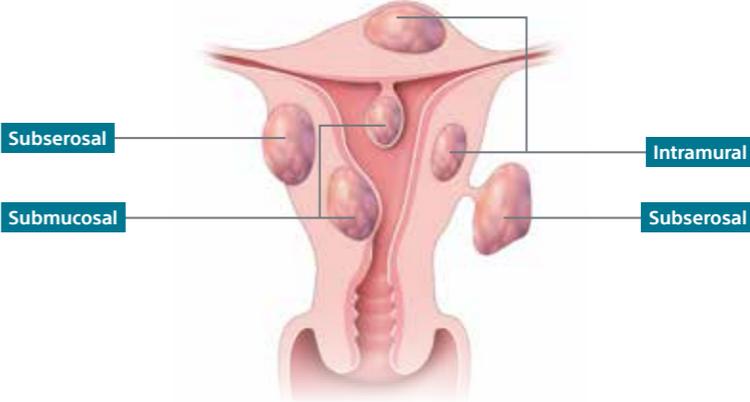
This pamphlet provides some answers to questions that patients and their families may have about uterine fibroids and the treatments that are available.

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## WHAT ARE UTERINE FIBROIDS?

Uterine fibroids are benign (non-cancerous) tumours which develop on or within the muscular wall of the uterus. They are comprised of dense, fibrous tissue which are fed by blood vessels. Fibroids are frequent occurrences and are the **most common benign tumours in women**. Doctors estimate that fibroids become clinically relevant in about 25% to 30% of all women aged between 30 and 50 years.<sup>1</sup>



Uterine fibroids can grow in various parts of the uterus.

- **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 in size. Some are no bigger than a pea while others can grow to the size of a melon. 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.

## WHAT ARE TYPICAL SYMPTOMS CAUSED BY UTERINE FIBROIDS?

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 ARE UTERINE FIBROIDS DIAGNOSED?

Your doctor may diagnose fibroids during a routine gynecologic examination. In order to confirm this diagnosis, your doctor may request that you undergo an ultrasound or MRI (Magnetic Resonance Imaging) examination.

## WHAT ARE THE TREATMENT OPTIONS FOR UTERINE FIBROIDS?

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:**

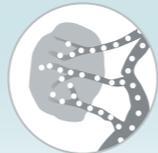
### Drug therapy



### Surgery



### Non-surgical therapy (Embolisation)



### Medical Therapy

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

### Surgical Therapy

There are two surgical options for uterine fibroids – myomectomy and hysterectomy.

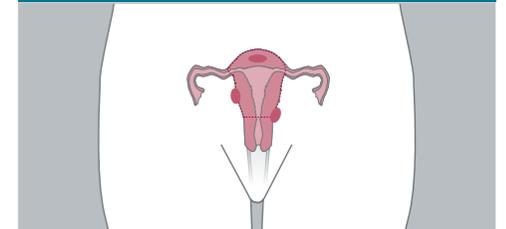
A **Myomectomy** removes uterine fibroids, without removing the uterus. Depending on the location of the fibroids, the myomectomy can be done through the pelvic area or through the vagina and cervix.

### Myomectomy



A **Hysterectomy** is a surgery performed to remove a woman's uterus and cervix. A supracervical hysterectomy only removes the uterus. In all cases, menstruation stops and a woman loses the ability to bear children.

### Hysterectomy



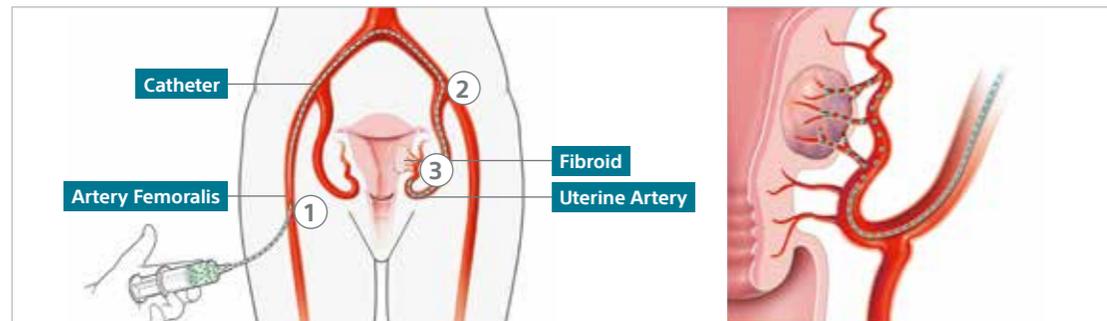
### Non-Surgical Therapy – Embolisation

Uterine fibroid embolisation (UFE) is a **less invasive approach** that is **designed to preserve the uterus**. The embolisation procedure is carried out by an interventional radiologist who is especially trained to use image guidance methods to gain access to vessels and organs and treat many conditions. (For embolisation procedure, see page 7).

## EMBOLISATION – PROCEDURAL DETAILS

In general the embolisation procedure is performed while the patient is conscious but sedated, drowsy and feeling no pain.

- 1 A **small opening measuring 1.5 mm** in diameter is made in the groin, through which a thin **catheter** is inserted into the artery.
- 2 The catheter is **guided through the arterial tree to the uterus** while the radiologist watches the progress of the procedure using a moving x-ray (fluoroscope).
- 3 **Tiny microspheres**, the size of grains of sand, **are injected into the artery** that is supplying blood to the fibroids, cutting of the blood flow.
- 4 It **may be necessary to repeat embolisation** for fibroids on the opposite side, through the **same opening** and using the same catheter and microcatheter combination.



Over time, the fibroids shrink, relieving symptoms.

The **average recovery time** before patients return to work or their normal daily activities **is approximately one week**. The reason most patients are not able to return to work sooner is due to the post-embolisation syndrome which causes a light flu-like illness. Your gynecologist and interventional radiologist will take care of **follow-up** including a MRI or ultrasound exam **in three to six months** to assess the results of embolisation and to insure that the blood supply to the fibroids is eliminated.

## WHAT IS ADENOMYOSIS?

Adenomyosis is the presence of **islands of ectopic endometrial tissue within the uterus myometrium**, known as “mucosal invasions”. It is a relatively common **benign** uterine pathology of the female reproductive tract, associated with heavy and painful menstrual periods. **Women can suffer on pure adenomyosis or in combination with fibroids.**

### Four types of adenomyosis<sup>3</sup>



### How is Adenomyosis diagnosed?

Same as for Uterine fibroids, your doctor may diagnose Adenomyosis during a routine gynecologic examination. In order to confirm this diagnosis, your doctor may request that you undergo an ultrasound or MRI (Magnetic Resonance Imaging) examination.

### What are the treatment options?

#### Medical Therapy

Medical therapy for adenomyosis may include the use of drugs to control symptoms and hormone therapy (GnRHa).

#### Surgical Therapy

There are two surgical options for adenomyosis – excision or enucleation (focal adenomyosis) or hysterectomy (deep myometrial involvement). A hysterectomy is a surgical procedure which removes the entire uterus.

#### Non-surgical Therapy – Embolisation

(see page 5).