

# **Uterine Artery Embolization (UAE) for Uterine Fibroids**

## *Information for patients*

### **Introduction**

- UAE may be used to relieve adverse symptoms due to uterine fibroids, which include heavy menstrual flow and pressure symptoms.
- After UAE, both uterine arteries will be blocked, the fibroid may shrink about 40-70% by volume and the symptoms may be relieved. For those with heavy menstrual flow and pain, about 80% have significant improvement; for those with pressure symptoms, 70-80% have satisfactory improvement.
- This procedure is performed by a radiologist with special training in interventional radiology. It will be performed in the Department of Radiology under image guidance.

### **Procedure**

- Before the procedure, some examinations will be performed which may include ultrasound, magnetic resonance imaging, blood test and endometrial biopsy.
- You will be admitted to the hospital, an intravenous line will be set and a urinary catheter will be inserted. The procedure is usually done under local anaesthesia and conscious sedation. Drugs for pain control (analgesics) and antibiotics will be given. Your vital signs will be monitored throughout the procedure.
- A small catheter is inserted into your femoral artery under the groin area and it is directed deeply to each uterine artery in turn. Another smaller catheter (coaxial catheter) may be inserted through the original catheter if necessary. Small particles will be injected to block the uterine arteries and their branches.
- Further analgesics may be given during and after the procedure if you experience pain.
- The duration of the procedure is about 2 hours.
- After the procedure your vital signs (like blood pressure and pulse rate) will be monitored.
- You will be discharged from hospital when your pain is under control, usually 24 hours after the procedure. Oral analgesics will be given to you.
- The pain will usually subside in a few days to 2 weeks and your symptoms will improve gradually. In the next 2 to 3 cycles after treatment, the original symptoms may persist.
- You will be regularly followed up by the gynaecologist, and also with MRI or ultrasound in the Department of Radiology.

### **Potential Complications**

- Women who are obese, who have significant pathology, who have undergone previous surgery or who have pre-existing medical conditions must understand that the quoted risks for serious or frequent complications will be increased.
- Anaesthetic complications
- Serious
  - Menstruation stops (Amenorrhoea) (about 2 in every 100, common if age <45, about 8 in every 100, common if age >45). A small percentage of patients may also experience irregular menstrual cycles. Amenorrhoea can be related to ovarian dysfunction or endometrial shrinkage.
  - Pelvic infection: may need intravenous antibiotics or hysterectomy (<2 in every 100, uncommon).
  - Fibroid passed out through vagina (<1 in every 10, common). This may require emergency dilation and curettage.
  - Sloughed-off subserosal fibroid (fibroid at the outer boundary of uterus) may lead to inflammation of the peritoneum.
  - Sexual dysfunction (rare).

Transient ovarian failure (rare).

Injury of uterine artery or adjacent arteries (rare).

Uterine necrosis (rare).

Nontarget embolization causing injury to other adjacent organs: bowel, buttock, bladder and nerves (very rare).

Massive blood clot to lungs (pulmonary embolism) (very rare).

Undiagnosed malignant lesion (leiomyosarcoma) (very rare, uterine sarcoma occurs in less than 0.2% of fibroids).

Radiation skin burn (very rare).

Further treatment may be needed for recurrent symptoms – 25% if <40 years old, 10% between 40-50 years old) e.g. repeat uterine artery embolization, myomectomy, hysterectomy

Procedure related death (very rare).

The overall adverse reactions related to iodine-base non-ionic contrast medium is below 7 in every 1000(uncommon). The mortality due to reaction to non-ionic contrast medium is below 4 in 1 000 000(very rare).

Effect on subsequent pregnancy and delivery: no long term study. Normal term delivery has been documented in medical literatures.

- Frequent

Transient pelvic pain occurs in almost all patients but this usually subsides within 14-17days and patient can return to normal daily activities or work.

Vaginal discharge (about 6 in 10, very common; majority will be transient).

Post embolization syndrome: transient fever, pain, nausea, malaise, increased white blood cell (<4 in 10, very common).

## Disclaimer

This leaflet was modified by the Dept of Obstetrics and Gynaecology, Queen Mary Hospital from the leaflet prepared by the Hong Kong Society of Interventional Radiology(prepared in 2010, version 2.0).

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	<b>Subject</b> <b>Uterine artery embolization for uterine fibroids</b>	<b>Issue Date</b>	<b>OCT 2014</b>
		<b>Next review date</b>	<b>OCT 2017</b>
		<b>Approved by</b>	<b>General Gynaecology Division, QMH</b>
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