Transcervical resection of fibroids (TCRF)

Transcervical Resection of Fibroids (TCRF) is a method of treating uterine fibroids which occur on the inside of the uterus. This leaflet explains what uterine fibroids are and also the procedure of a TCRF.

What are uterine fibroids?
Uterine fibroids or myomas are benign tumours of the uterus (womb) made up of smooth muscle and are usually harmless. They are very common in women between 25 to 45 years of age occurring in about 20 to 30% of women in this age group. Fibroids are 2-3 times more common in women of Afro-Caribbean origin and tend to be larger and more numerous in this group of women.

Fibroids may occur on the inside of the womb (submucosal fibroids), in the muscle wall (intramyometrial fibroids), or growing to the outside of the womb (subserous fibroids). They may vary in size from being very small (pea sized) to be quite large (the size of a melon). Fibroids grow under stimulation from hormones produced by the ovaries. After the menopause when hormones are no longer produced, (The Change) fibroids tend to shrink but may not disappear.

What symptoms do fibroids cause?
Up to three quarters of women with fibroids may not have symptoms, therefore many women don’t know they have fibroids. Whether or not you have symptoms depends on the size and location of the fibroids in your womb.

Fibroids can cause heavy menstrual flow by increasing the overall size of the womb. Heavy bleeding may present as flooding, longer duration periods or passing large clots. As a result some women may develop anaemia (low blood iron), causing weakness and tiredness. Fibroids can also cause painful periods and lower abdominal (pelvic) pain. They may also contribute to symptoms such as lower back pain or pelvic discomfort as well as passing urine frequently and/or constipation. Fibroids may be present in about 5-10% of women who have infertility (difficulty in getting pregnant).

How are Fibroids detected?
Uterine fibroids can be detected in a number of different ways. As the womb is generally larger than normal, a pelvic or internal examination may determine that the womb is enlarged.

A pelvic ultrasound (internal or abdominal) may show fibroids in the womb. Occasionally a more detailed scan called an MRI (magnetic resonance imaging) scan may need to be performed to study a uterine fibroid more clearly.

Fibroids which occur on the inside of the uterus can be diagnosed by a hysteroscopy procedure. This involves passing a small telescope (hysteroscope) through the neck of the uterus (cervix) and into the uterus. Hysteroscopy can be carried out in an outpatient clinic with or without a local anaesthetic or as an inpatient procedure using a general anaesthetic.

Fibroids which occur on the outside of the uterus can also be diagnosed by a laparoscopy procedure. This involves inserting a thin telescope (laparoscope) via a tiny cut into the tummy, when you have been given a general
anaesthetic. The operation is usually carried out as a day surgery procedure and takes about 30 minutes. You should be able to go home the same day.

What is a Transcervical Resection of Fibroids?
Transcervical Resection of Fibroids (TCRF) is a way of treating fibroids that occur on the inside of the uterus, in the uterine (womb) lining.

Why is it performed?
It is generally performed to remove fibroids that are causing menstrual problems or that may be interfering with ability to conceive.

When do you come in to hospital?
Once you have been seen by your gynaecologist in clinic and the decision made for you to have a TCRF, an appointment will be made for you to attend a pre-assessment clinic usually about a week before your scheduled operation. This appointment will give us an opportunity to check that you are fit for the operation. We will carry out routine blood investigations and possibly other investigations such as a chest X-ray if required. The appointment will give you an opportunity to discuss your operation further, and may take about an hour.

TCRF is usually performed under a general anaesthetic and may involve an overnight stay in hospital. However this is not always the case and TCRF is mostly carried out as a ‘day case’. This means that you will be admitted to hospital, have the procedure and go home the same day. Your doctor will decide with you which is the most appropriate.

What happens before/on the day of my operation?
You will be admitted on the day of your operation and both your gynaecologist and anaesthetist will see you. You will be asked the day of your last menstrual period (if relevant). You will also have the procedure explained to you and be asked to sign a written consent form.

What actually happens during a TCRF?
When you are asleep after a general anaesthetic, the cervix (the neck of the uterus) is gently stretched by a number of gradually increasing sized dilators. Once sufficient stretching has been achieved an operating hysteroscope (called a resectoscope) is inserted through the cervix into the uterus.

The resectoscope is connected to a fluid system. Fluid is required to slightly distend the uterus and allow a clear view. The view of the operating site (inside the uterus) is also aided by a camera system which allows the surgeon to carry out the operation with the aid of a monitor similar to a TV screen.

Once the uterus has been distended and the fibroid is clearly seen, an electrical current is passed through a cutting loop attached to the resectoscope and the fibroid is ‘shaved off’ the uterine lining. The cut shavings from the fibroid are removed and sent for analysis in the laboratory. We will usually take still pictures before and after the operation so that you will be able to see the effects of the surgery.

The whole procedure takes about 30 minutes but may take a little longer for larger fibroids, and you will usually be given a dose of antibiotics during the procedure before you awaken.
During and at the end of the operation all the fluid used is collected and checked so that a fluid balance can be determined.

**What other procedures may also be done?**

If you have symptoms of heavy menstrual bleeding your doctor may suggest treatment of TCRF and Endometrial Ablation (EA) at the same time. EA is a treatment for heavy periods in which the womb lining is destroyed. If you need EA your doctor will discuss this fully with you before the procedure and will go over the procedure, risks and outcomes and you will be given appropriate information leaflets.

**Treatment of large submucosal uterine fibroids**

If you have a large fibroid you may be given a monthly injection (a gonadotrophin releasing hormone analogue – GnRHa) to shrink the fibroid for 2-3 months prior to the fibroid resection. Some women will experience some side effects from the injection including hot flushes and night sweats and may have cessation of their periods for a month or so. These symptoms are short lived and should stop after about 4-6 weeks.

Another option that will be discussed with you if you have a large fibroid is a two-stage surgical procedure. After the first fibroid resection you may be offered a further TCRF 2-3 months later to remove any remnants of the fibroid.

**Recovery after the operation**

Once the operation has been completed you will be taken to the recovery area to awaken from the anaesthetic and then transferred back to the ward. You may have some cramping abdominal pains after the procedure but you will be given adequate pain relief. You may also experience some blood loss from the vagina but this will not be excessive. Once you have fully recovered you will be given something to drink and a light meal.

Most women will be discharged home either later that day or early the next day.

**What are the possible risks and complications of hysteroscopic surgery?**

There is a small risk of complication from all hysteroscopic surgery. As with other invasive operations on the womb there is a risk of an infection of the uterus. This will usually present as an offensive vaginal discharge and you will need to be treated with antibiotics from your GP. Bleeding is a risk and may need to be controlled by the pressure of an inflated catheter inserted into the uterus. The risk of perforation of the uterus (making a small hole in the uterus) is about 1-2 per 1000 operations. If this occurs, there is a very small risk that bowel injury might occur. If necessary a laparoscopy may be performed at the time of your operation to check this. As fluid is used to distend the uterus for the operation, excessive fluid absorption can occur in 1-5% of hysteroscopic resections. This can usually be managed by blood test monitoring, insertion of a urinary catheter and diuretics, and may require a longer stay in hospital.

Despite these potential risks Transcervical Fibroid Resection is a safe procedure.

**What are the benefits of hysteroscopic surgery?**

The advantages of hysteroscopic surgery for fibroids include (a) avoiding conventional surgery with a laparotomy (tummy cut), (b) avoiding an incision on the uterus which may potentially influence the type of delivery in subsequent pregnancies, and (c) preventing the
need for a longer hospital stay. Hysteroscopic surgery allow a quicker return to your normal activities.

**What results can you expect after the procedure?**
If you had heavy periods or irregular menstrual bleeding before your operation you can expect these symptoms to improve. Your periods will be lighter and more regular after the operation however this will take place over 2-3 months. If you had an endometrial ablation at the same time the reduction in bleeding will be more pronounced. If you initially had problems in conceiving, the chance of getting pregnant is improved after TCRF. However because conceiving depends on many factors it is difficult to determine which patients will be successful.

**What happens when you get home?**
After you have been discharged from hospital you may still have some abdominal cramps so it will be useful to have some pain killers to take as per the manufacturers' instructions. Vaginal bleeding may occur after the operation for 2-4 weeks and then should settle. You should rest for a couple of days and then gradually resume your normal activities.

This leaflet explains some of the most common side-effects that some people may experience. However, it is not comprehensive. If you experience other side-effects and want to ask anything else related to your treatment please speak to the Gynaecology Nurses in Day Surgery Wycombe Hospital 01494 526161.

**How can you help reduce healthcare associated infections?**
Infection prevention and control is important to the well-being of our patients and for that reason we have infection prevention and control procedures in place. Keeping your hands clean is an effective way of preventing the spread of infections.

If you need advice or further assistance, please contact our patient advice and liaison service (PALS): call 01296 316042 or email bht.pals@nhs.net

Please remember that this leaflet is intended as general information only. We aim to make the information as up to date and accurate as possible, but please note that it is subject to change. Please therefore always check specific advice on any concerns you may have with your doctor.

**Division of Women, Children & Sexual Health Services**

**Approvals:**
Gynae Guidelines Group: Sep 07 & Apr 08 & Jun 2010, V3 Jan 2014 (Chair’s action), V4 Jun 2017 (Chair’s action), V5 July Patient Evaluation forms: Completed
Equality Impact Assessment: Apr 08, V5 Jul 2021
Scrutiny Board: Jun 2010
O&G SDU: V3 Mar 2014 V4 Jul 2017 (Chair’s action), V5 Oct 2021
BMV: V3 Mar 2014
Patient Experience Group: Apr 08, V3 Jun 2014