Laparoscopic surgery for endometriosis

Introduction

This leaflet provides information for those who have been offered or are considering laparoscopic surgery for the diagnosis and treatment of endometriosis.

Diagnosis of endometriosis

Endometriosis is best diagnosed and assessed by actually looking at the disease, and if possible, by taking a biopsy, this is where the surgeon removes a small piece of suspected endometriosis tissue, this tissue is then looked at under a microscopic . This is the only means of making a definite diagnosis.

Laparoscopy is an operation where a small telescope (laparoscope) is inserted into the abdomen through a small cut (key-hole surgery) to look directly at the tissues.

At the same time, various procedures can often be performed in order to destroy or remove the endometriosis, remove endometriotic cysts and release scar tissue (adhesions).

Is laparoscopy always needed to diagnose endometriosis?

Laparoscopy is the best test to diagnose endometriosis. Endometriosis can sometimes be seen or felt on vaginal examination and certain types of endometriosis can be seen and diagnosed on ultrasound scan and MRI scan. However, a normal vaginal examination or a normal scan result does not exclude endometriosis.

What happens during laparoscopic surgery for endometriosis?

When you have a laparoscopy you can usually go home the same day (day case surgery) but you should take an overnight bag just in case you are advised to stay. You will require a general anaesthetic, and you must have nothing to eat or drink for six hours before your laparoscopy.

If laparoscopy is used to treat as well as diagnose endometriosis, the aim of the surgery is to:

- Destroy or remove areas of endometriosis.
- Destroy or remove ovarian endometriotic cysts, by cutting away or excising the cyst wall (capsule) or opening the cyst, draining the chocolate fluid and destroying the capsule.
- Divide adhesions to free tissues or improve fertility.

At the start of the operation, your bladder will be emptied (catheterised). A fine needle will then be inserted inside your belly button (umbilicus) and your abdomen will be filled with carbon dioxide gas.

The carbon dioxide gas lifts the tummy wall away from the bowel to create space for examination and possible surgical treatment.

Two or three small (approximately 1cm) cuts (incisions) are made, usually one just inside the belly button and one on the bikini line for an instrument to assist with visualising the organs. Another cut may be made to add a further instrument to remove endometriosis.

A careful inspection is made of the womb (uterus), ovaries, Fallopian tubes, Pouch of Douglas (area behind the womb near the rectum), bowel, bladder and all surrounding areas and a record of the severity of the disease is made by either drawing, photographs or video.

Many different appearances of endometriosis have now been recognised. In some cases, if the tissues are stuck together (adhesions), it may not be possible to see some or all of these organs.

The surgery has been shown to be of benefit but recurrence rates are high. Failure to respond to surgical treatment may be due to incomplete removal or destruction of the disease or because of recurrence.

Laparoscopic surgery techniques

There are now a number of different techniques used by surgeons treating endometriosis; deep endometriosis is usually treated by excision.

What treatment can and should be carried out will be discussed with you before your operation.

Not all techniques are available at all hospitals.

Laser ablation/excision

The word laser stands for Light Amplification by Stimulated Emission of Radiation i.e. a thin beam of concentrated light that is an intense energy beam and burns tissues. There are different types of lasers including carbon dioxide, KTP, Yag, Argon, Diode.

Electrocoagulation/Diathermy

This is the use of electrical heat as used in general surgery. It can be used to destroy and remove endometriosis, as well as control bleeding.

Harmonic Scalpels

These are devices with a vibration tip and are used for destruction or removal of endometriosis.

Excision Surgery

This involves actually cutting out areas of endometriosis using either - scissors, electrosurgery, ultrasound or lasers.

Risks of laparoscopy

As with any surgical procedure, there are risks attached to a laparoscopy. Out of every 1,000 patients undergoing diagnostic laparoscopy, one to three will require a laparotomy to repair an injury. This means any woman undergoing laparoscopic surgery should understand that it is possible to wake up after the operation with a larger incision on your tummy. In this situation, which may be life-threatening, it is not possible to wake the patient up to discuss the options before a laparotomy is conducted.

Recovery from a more major operation will take longer, with possibly up to a week or longer in hospital and 6-8 weeks recovery at home.

Other rare complications:

Infection (at the site or wound, stitches or bladder, urinary infection (cystitis)) - 1 in 20

Deep bruising or collection of blood (haematoma) - 1 in 20

Perforation (injury causing a small hole) of the uterus - 1 in 200

Bleeding inside the tummy (haemorrhage) -1 in 200

Clot in a vein of the leg or lung (thrombosis) - 1 in 200

Bladder perforation - 1 in 200

Bowel perforation - 1 in 250

Damage to a major blood vessel - 1 in 500

Death - 1 in 12,000

Surgery is more difficult, and therefore riskier, in patients who are overweight or who have abdominal scars from previous surgery. Obesity can also limit the type of surgery performed and its effectiveness.

After the operation

The anaesthetic finishes as soon as the operation is completed and waking occurs quickly. Painkillers will have been given to you by the anaesthetist, so that they are already working when you wake up.

You can expect to feel sore around the incisions and sometimes have a period-like pelvic pain. There may be some swelling or bruising around the wounds. The carbon dioxide gas may cause a feeling of bloating and discomfort in your ribs and shoulders. This is normal and will disappear over a few days as the gas slowly reabsorbs. The discomfort can be relieved by painkillers in the meantime.

Some fluid may be left inside the abdomen to prevent the formation of adhesions (and will be absorbed over the following 48-72 hours). You may feel sick (nausea) or even be sick (vomit). This can be treated with anti-sickness medication.

Occasionally, patients may be advised to stay overnight. It is essential to be accompanied home and to avoid driving or operating machinery for 48 hours. The time required off work will depend on the amount of surgery performed and the physical demands of your job. This should be discussed with your doctor but will usually be between 1-4 weeks.

At home, you can take painkillers such as paracetamol if needed. Some patients may be given a course of antibiotic tablets to take home. Slight bleeding from the vagina is normal and is nothing to worry about. The cuts should be kept clean and dried carefully after a bath or shower.

It is normal to feel sore after the operation. You should start to feel better within two weeks.

It may take up to six months to feel the full benefit from the surgery.

Reasons to contact the ward or your GP after laparoscopic surgery

- Severe pain or fever after going home
- Nausea or vomiting
- Increased bleeding from the cuts
- One or more of the cuts become painful
- Smelly vaginal discharge
- Smelly discharge from the cuts
- If you are unable to pass urine

References

- ESHRE Information for women with endometriosis. https://www.eshre.eu/-/media/sitecore-files/Guidelines/Endometriosis/ESHRE-ENDOMETRIOSIS-patient-Guideline_21032022.pdf?la=en&hash=79017723C4058B492626F8A02B10BC3590BAEEC5
- ESHRE Guideline on the management of women with endometriosis. https://www.eshre.eu/-/media/sitecore-files/Guidelines/Endometriosis/ESHRE-GUIDELINE-ENDOMETRIOSIS-2022_2.pdf?la=en&hash=E1628E24D374F3EE6C9651EDB33235F8EB8ACBDA
- NICE Endometriosis: diagnosis and management. https://www.nice.org.uk/guidance/ng73

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Feedback:

If you have any comments about this leaflet, please contact us at admin@endometriosis-uk.org.

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