Gynaecology and reproductive medicine

Ovarian diathermy

Information for patients

Introduction

This leaflets explains what ovarian diathermy (sometimes called ovarian drilling) is and how to prepare for the procedure. Please feel free to ask our team any questions you have about the information below.

What is ovarian diathermy?

Ovarian diathermy is a relatively minor operation, which will be performed under a general anaesthetic.

The procedure is performed by laparoscopy, where a telescope (called a laparoscope) is inserted through a small cut at the navel into the abdominal cavity. The cavity is inflated with gas (carbon dioxide) to allow a visual assessment of the ovaries and other pelvic organs.

Other small cuts may be made just above the pubic bone or on either side, in order to insert additional fine instruments that help the surgeon to move the uterus or ovaries and gain better access to the ovary itself.

During the operation a probe is also inserted through the cervix into the uterus to help expose the ovary surface. Once exposed, small electrical burning points (diathermy) are made in the ovarian capsule – usually four points on each ovary.

What are the benefits of ovarian diathermy?

Ovarian diathermy or ovarian drilling is used as a treatment for clomiphene resistant polycystic ovary syndrome (where clomiphene or other medication has failed to stimulate the ovaries). The diathermy to the ovary alters the hormonal environment and can result in spontaneous ovulation (release of an egg) where previously there had been no response to clomiphene.

There are circumstances where ovarian diathermy will not work; for example, in women who are significantly overweight. With time, usually after several months or years, the effect of the procedure can wear off and this results in a return to a non-ovulatory (not releasing an egg) state. There is little evidence that this operation significantly improves the other symptoms associated with polycystic ovary syndrome.
What are the risks involved in having this procedure?

As with any procedure performed under a general anaesthetic, there are small risks associated with the anaesthetic. The risk of life-threatening anaesthetic complications or death associated with laparoscopy is reported at about 1 in 100,000.

Additional surgical risks are:
damage to internal organs (for example the bowel or bladder) or blood vessels during the insertion of the gas to inflate the abdomen, the insertion of the laparoscope, or insertion of additional probes. This occurs in about 0.5 per cent all laparoscopies and may need further surgery, usually by laparotomy (a large cut on the abdomen), to repair any damage.

Although a longer time in hospital and further time off work than initially planned will be needed, most women have no long-term problems.

The risks of internal damage are increased if you are significantly overweight, have had previous abdominal or pelvic surgery, or have had previous problems from laparoscopy.

Insertion of the laparoscope or additional probes may also damage blood vessels in the abdominal wall causing bleeding and a large bruise (haematoma) to form. Haematomas heal by themselves with time although they can be painful and unsightly. Other surgical risks are trauma to the cervix while inserting the probe for the dye, which may cause bleeding or a hole in the uterine cavity. This is very rare.

Any procedure in which surgical instruments are passed through the cervix into the uterus also increases the risk of infection within the cavity or fallopian tubes. In order to reduce this risk, you will be required to take antibiotics. The insertion of a probe into the uterus to allow movement during the procedure may cause damage to the cervix and possibly bleeding or a hole in the uterine cavity. This is very rare.

Diathermy to the ovary can lead to the formation of minimal scarring or adhesions (where scar tissue can cause internal organs to be stuck together when they are not supposed to be) around the ovary. These may affect the release of the egg and therefore the treatment should be reserved for women who have failed to respond to clomiphene treatment. There have been occasional reports of irreversible ovarian damage (atrophy) following ovarian diathermy.

Alternatives to ovarian diathermy

Not all women will have ovarian diathermy. The decision is taken on an individual basis in discussion with your doctor. If you have not had a course of clomiphene, this may be offered to you as an alternative treatment.

The day of the operation

Do not eat or drink for at least six hours before the operation. We will ask you to wear a hospital gown before being transferred to the operating theatre and to remove all your clothes, jewellery and make-up. Please leave all valuables at home.
After the operation

Your nurse will monitor you to make sure you are recovering well from the procedure and that your puncture site is clean and dry. You can eat and drink as soon as you feel comfortable enough to do so.

A doctor or nurse will see you after the operation and explain the findings to you. You must arrange for someone to escort you home and be with you overnight. Do not drive or operate machinery for 24 hours following a general anaesthetic.

You will be discharged once you are fully awake, have passed urine and have been able to eat and drink something.

Any other treatment or outpatient follow-up will be arranged before you leave.

At home

Once at home you can remove the dressings and bathe or shower the following morning. The small cuts may be left exposed, but you should ensure that they are kept clean and dry. Most women are able to return to work after 48 hours.

You should expect some slight vaginal bleeding, which may last for a couple of days. You should not use tampons or have sex during this time. Most women experience some abdominal or pelvic discomfort, abdominal bloating and referred pain in the shoulder. These symptoms should ease after a few days. Walking around and sitting upright will help dispel the remainder of the gas and help you feel more comfortable. You can also take some mild painkillers, such as paracetamol, if you need to.

Once at home, you may remove the dressings and bathe or shower the following morning. The small incisions may be left exposed, but you should ensure that they are kept clean and dry. The stitches usually dissolve or can be removed three to five days later by the practice nurse at your GP surgery (you may have to arrange this). Most women are able to return to work after 48 hours.

What should I look out for at home?

Contact your GP or the hospital if you experience:

- severe pain which is not helped by mild painkillers
- a raised temperature or fever (over 38°C)
- persistent bleeding which is heavier than a period
- offensive-smelling or greenish vaginal discharge
- persistent bleeding or discharge from the incision sites
Useful contacts

Women’s Health Concern  
Helpline: 0845 123 2319  
www.womens-healthlondon.concern.org

Royal College of Obstetricians and Gynaecologists  
www.rcog.org.uk

How do I make a comment about my visit?

We aim to provide the best possible service and staff will be happy to answer any of the questions you may have. If you have any suggestions or comments about your visit, please either speak to a member of staff or contact the patient advice and liaison service (PALS) on 020 3313 0088 (Charing Cross, Hammersmith and Queen Charlotte’s & Chelsea hospitals), or 020 3312 7777 (St Mary’s and Western Eye hospitals). You can also email PALS at pals@imperial.nhs.uk. The PALS team will listen to your concerns, suggestions or queries and is often able to help solve problems on your behalf.

Alternatively, you may wish to express your concerns in writing to:

Chief executive - complaints  
Imperial College Healthcare NHS Trust  
Trust Headquarters  
The Bays, South Wharf Road  
London W2 1NY

Alternative formats

This leaflet can be provided on request in large print, as a sound recording, in Braille, or in alternative languages. Please contact the communications team on 020 3312 5592.

We have a free and premium wi-fi service at each of our five hospitals. For further information please visit our website: www.imperial.nhs.uk