

## OG07 Laparoscopy and Dye Test

Expires end of February 2023

You can get information locally from:

Huddersfield Royal Infirmary

- Main switchboard, who can connect you to the relevant department, on 01484 342 000
- Patient Advice and Liaison Service (PALS) on 01484 342 128

Calderdale Royal Hospital

- Main switchboard, who can connect you to the relevant department, on 01422 357 171
- Patient Advice and Liaison Service (PALS) on 01422 222 417

You can also contact:

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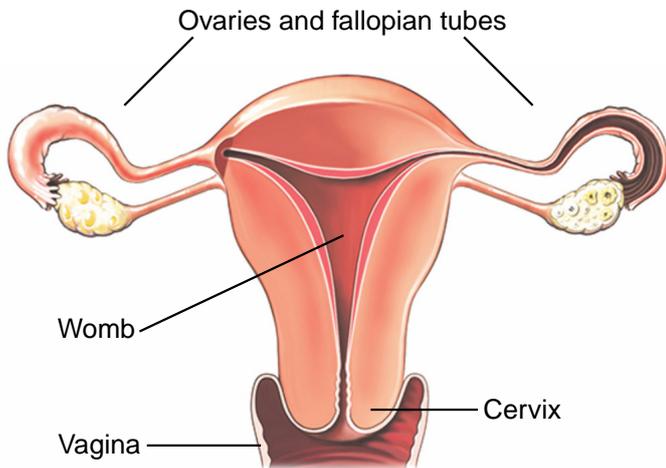
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UNITED KINGDOM

## What is a laparoscopy and dye test?

A laparoscopy and dye test is an operation using keyhole surgery to look at your abdominal and pelvic organs, particularly your fallopian tubes. It is used to help find out why you are having difficulty becoming pregnant. For some women minor treatments can be performed at the same time.



The womb and surrounding structures

Your gynaecologist has suggested a laparoscopy and dye test. However, it is your decision to go ahead with the operation or not. This document will give you information about the benefits and risks to help you to make an informed decision.

If you have any questions that this document does not answer, it is important that you ask your gynaecologist or the healthcare team. Once all your questions have been answered and you feel ready to go ahead with the procedure, you will be asked to sign the informed consent form. This is the final step in the decision-making process. However, you can still change your mind at any point.

## What are the benefits of surgery?

Your symptoms and a physical examination have not helped to find out why you are not becoming pregnant. The dye test will show if your fallopian tubes are blocked and may identify other conditions associated with infertility. The laparoscopy will help to find out if you have one of the following conditions.

- Endometriosis, where the lining of your uterus (womb) grows outside your womb.
- Pelvic infection.
- Tissues can join together around the tubes or ovaries in an abnormal way (adhesions).
- Ovarian cysts.
- Fibroids, where part of the muscle of your womb becomes overgrown.

Your gynaecologist may find a minor cause of the symptoms, which they are able to treat during the operation (avoiding the need for a second operation). If treatment during the operation is likely, your gynaecologist will discuss this with you beforehand.

Sometimes they may not find a cause. This is useful information as your gynaecologist will be able to reassure you that there is unlikely to be a problem with your pelvic organs.

## Are there any alternatives to surgery?

An x-ray called a hysterosalpingogram can be performed to see if your tubes are blocked. Another option is a similar test called HyCoSy, which uses ultrasound. Your gynaecologist will be able to discuss the options with you.

These techniques are usually recommended only if you do not have any symptoms and show only if your tubes are blocked. They cannot show if there are any other conditions affecting your pelvic organs that may be causing your infertility.

## What will happen if I decide not to have the operation?

Your gynaecologist will try to find out the cause of your infertility as accurately as possible and may recommend one of the alternatives.

## What happens before the operation?

Your gynaecologist may arrange for you to have a pre-admission assessment. They will carry out several tests and checks to find out if you are fit enough for the operation. If you have any questions about the operation, you should ask the healthcare team at this visit.

Let the healthcare team know if you are likely to be on your period at the time of the operation, as the operation may need to be postponed.

Your gynaecologist may ask you to have a pregnancy test. Sometimes the test does not show an early-stage pregnancy so let your gynaecologist know if you could be pregnant.

Your gynaecologist may also recommend that you have vaginal and cervical swabs (using cotton wool to take samples from the surface of your vagina and cervix) to send to the laboratory for analysis. This will help in finding out if you have an infection.

## What does the operation involve?

The healthcare team will carry out a number of checks to make sure you have the operation you came in for. You can help by confirming to your gynaecologist and the healthcare team your name and the operation you are having.

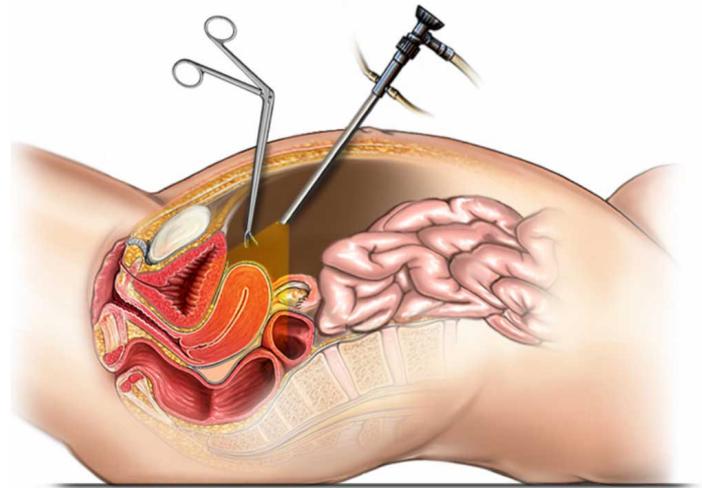
The operation is usually performed under a general anaesthetic but various anaesthetic techniques are possible. Your anaesthetist will discuss this with you. You may also have injections of local anaesthetic to the cuts on your abdomen to help with the pain after the operation. You may be given antibiotics during the operation to reduce the risk of infection. The operation usually takes about 15 to 30 minutes.

Your gynaecologist may empty your bladder using a catheter (tube). They may also examine your vagina.

An instrument called a manipulator might be inserted through the neck of the womb (cervix) and into your womb by your gynaecologist to help them perform the surgery. The manipulator allows them to move your womb during the laparoscopy so that they can get a good view of your pelvic area.

Your gynaecologist will make a small cut, usually on or near your belly button, so they can insert an instrument in your abdominal cavity to inflate it with gas (carbon dioxide). They will usually make a further cut on your 'bikini' line so they can insert tubes (ports) into your abdomen. Your gynaecologist will insert instruments through the ports along with a telescope so they can see

inside your abdomen and perform any minor procedures.



Laparoscopic surgery

Your gynaecologist may make one or two further small cuts so they can insert more ports, depending on any surgery you need. They may need to place instruments through your vagina to help them perform the surgery.

Your gynaecologist will use the manipulator which was inserted through the cervix to inject dye which passes through your cervix, uterine cavity and down your fallopian tubes. Your gynaecologist will look at how the dye moves through your fallopian tubes.

Your gynaecologist will remove the instruments and close the cuts.

## What should I do about my medication?

Make sure your healthcare team knows about all the medication you take and follow their advice. This includes all blood-thinning medication as well as herbal and complementary remedies, dietary supplements, and medication you can buy over the counter.

## How can I prepare myself for the operation?

If you smoke, stopping smoking now may reduce your risk of developing complications and will improve your long-term health.

Try to maintain a healthy weight. You have a higher risk of developing complications if you are overweight.

Regular exercise should help to prepare you for the operation, help you to recover and improve your long-term health. Before you start exercising, ask the healthcare team or your GP for advice.

You can reduce your risk of infection in a surgical wound.

- In the week before the operation, do not shave or wax the area where a cut is likely to be made.
- Try to have a bath or shower either the day before or on the day of the operation.
- Keep warm around the time of the operation. Let the healthcare team know if you feel cold.
- If you are diabetic, keep your blood sugar levels under control around the time of your procedure.

If you have not had the coronavirus (Covid-19) vaccine, you may be at an increased risk of serious illness related to Covid-19 while you recover. Speak to your doctor or healthcare team if you would like to have the vaccine.

## What complications can happen?

The healthcare team will try to reduce the risk of complications.

Any numbers which relate to risk are from studies of people who have had this operation. Your doctor may be able to tell you if the risk of a complication is higher or lower for you. Some risks are higher if you are older, obese, you are a smoker or have other health problems. These health problems include diabetes, heart disease or lung disease.

Some complications can be serious and can even cause death (risk: 3 to 8 in 100,000).

Using keyhole surgery means it is more difficult for your gynaecologist to notice some complications that may happen during the operation. When you are recovering, you need to be aware of the symptoms that may show that you have a serious complication. You should ask

your doctor if there is anything you do not understand.

Your anaesthetist will be able to discuss with you the possible complications of having an anaesthetic.

## General complications of any operation

- Feeling or being sick. Most women have only mild symptoms and feel better within 1 to 2 days without needing any medication.
- Bleeding during or after the operation. You may need a blood transfusion or another operation.
- Infection of the surgical site (wound). It is usually safe to shower after 2 days but you should check with the healthcare team. Let the healthcare team know if you get a high temperature, notice pus in your wound, or if your wound becomes red, sore or painful. An infection usually settles with antibiotics but you may need special dressings and your wound may take some time to heal. In some cases another operation might be needed. Do not take antibiotics unless you are told you need them.
- Allergic reaction to the equipment, materials or medication. The healthcare team is trained to detect and treat any reactions that might happen. Let your gynaecologist know if you have any allergies or if you have reacted to any medication or tests in the past.
- Blood clot in your leg (deep-vein thrombosis – DVT). This can cause pain, swelling or redness in your leg, or the veins near the surface of your leg to appear larger than normal. The healthcare team will assess your risk. They will encourage you to get out of bed soon after the operation and may give you injections, medication, or special stockings to wear. Let the healthcare team know straight away if you think you might have a DVT.
- Blood clot in your lung (pulmonary embolus), if a blood clot moves through your bloodstream to your lungs. Let the healthcare team know straight away if you become short of breath, feel pain in your chest or upper back, or if you cough up blood. If you are at

home, call an ambulance or go immediately to your nearest Emergency department.

- Chest infection. If you have the operation within 6 weeks of catching Covid-19, your risk of a chest infection is increased (see the 'Covid-19' section for more information).

### Specific complications of this operation

- Damage to structures such as your bowel, bladder or blood vessels when inserting instruments into your abdomen (risk: less than 3 in 1,000). The risk is higher if you have had previous surgery to your abdomen. If an injury does happen, you may need open surgery. About 1 in 3 of these injuries is not obvious until after the operation.
- Developing a hernia near one of the cuts used to insert the ports (risk: 1 in 100). Your gynaecologist will try to reduce this risk by using small ports (less than a centimetre in diameter) where possible or, if they need to use larger ports, using deeper stitching to close the cuts.
- Surgical emphysema (a crackling sensation in your skin caused by trapped carbon dioxide), which settles quickly and is not serious.
- Making a hole in your womb or cervix with possible damage to a nearby structure during placement of the manipulator (risk: less than 8 in 1,000). You may need to stay overnight for close observation in case you develop complications. You may need another operation (risk: less than 1 in 1,000).
- Failure to find out what the problem is. If you do have a problem, sometimes the gynaecologist may not be able to find out what it is. Sometimes it may appear that your fallopian tubes are blocked but this can happen if the tubes go into a spasm or if the dye spills around the neck of your womb. Your gynaecologist may recommend that you have further tests.
- Failed procedure, if it is not possible to insert the instruments inside your abdominal cavity. You may need to stay overnight for close observation.
- Infection of the gynaecological organs or bladder (cystitis). You may need antibiotics.

### Covid-19

A recent Covid-19 infection increases your risk of lung complications or death if you have an operation under general anaesthetic. This risk reduces the longer it is since the infection. After 7 weeks the risk is no higher than someone who has not had Covid-19. However, if you still have symptoms the risk remains high. The risk also depends on your age, overall health and the type of surgery you are having.

You must follow instructions to self-isolate and take a Covid-19 test before your operation. If you have had Covid-19 up to 7 weeks before the operation you should discuss the risks and benefits of delaying it with your surgeon.

### Consequences of this procedure

- Pain. The healthcare team will give you medication to control the pain and it is important that you take it as you are told so you can move about and cough freely. After keyhole surgery, it is common to have some pain in your shoulders because a small amount of carbon dioxide gas may be left under your diaphragm. Your body will usually absorb the gas naturally over the next 24 hours, which will ease the symptoms.
- Unsightly scarring of your skin.

### How soon will I recover?

#### In hospital

After the operation you will be transferred to the recovery area and then to the ward. The healthcare team will tell you what was found during the laparoscopy and dye test and discuss with you any treatment or follow-up you need.

You should be able to go home the same day. However, your doctor may recommend that you stay a little longer.

You need to be aware of the following symptoms as they may show that you have a serious complication.

- Pain that gets worse over time or is severe when you move, breathe or cough.
- A heavy discharge or bleeding from your vagina.

- A high temperature or fever.
- Dizziness, feeling faint or shortness of breath.
- Feeling sick or not having any appetite (and this gets worse after the first 1 to 2 days).
- Not opening your bowels and not passing wind.
- Swelling of your abdomen.
- Difficulty passing urine.

If you do not continue to improve over the first few days, or if you have any of these symptoms, let the healthcare team know straight away. If you are at home, contact your gynaecologist or GP. In an emergency, call an ambulance or go immediately to your nearest Emergency department.

## Returning to normal activities

If you had sedation or a general anaesthetic and you do go home the same day:

- a responsible adult should take you home in a car or taxi and stay with you for at least 24 hours;
- you should be near a telephone in case of an emergency;
- do not drive, operate machinery or do any potentially dangerous activities (this includes cooking) for at least 24 hours and not until you have fully recovered feeling, movement and co-ordination; and
- do not sign legal documents or drink alcohol for at least 24 hours.

To reduce the risk of a blood clot, make sure you carefully follow the instructions of the healthcare team if you have been given medication or need to wear special stockings.

Rest for 1 to 2 days and take painkillers if you need them. If you develop any problems such as bleeding or a discharge from your vagina, let your doctor know.

Regular exercise should help you to return to normal activities as soon as possible. Before you start exercising, ask the healthcare team or your GP for advice.

Do not drive until you can control your vehicle, including in an emergency, and always check your insurance policy and with the healthcare team.

## Summary

A laparoscopy and dye test helps to find out the cause of certain gynaecological problems associated with infertility, particularly if your fallopian tubes are blocked. For some women minor treatments can be performed at the same time.

Surgery is usually safe and effective but complications can happen. You need to know about them to help you to make an informed decision about surgery. Knowing about them will also help to detect and treat any problems early.

Keep this information document. Use it to help you if you need to talk to the healthcare team.

Some information, such as risk and complication statistics, is taken from global studies and/or databases. Please ask your surgeon or doctor for more information about the risks that are specific to you, and they may be able to tell you about any other suitable treatments options.

This document is intended for information purposes only and should not replace advice that your relevant healthcare team would give you.

## Acknowledgements

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### Illustrator

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