Sterilisation for women and men: what you need to know

Royal College of Obstetricians and Gynaecologists

Setting standards to improve women's health

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Contents

Key points

- Sterilisation is a permanent way of preventing pregnancy. It involves having an operation.
- The method used for women is called tubal occlusion. The method used for men is called vasectomy.
- If you are in a long-term relationship you need to consider both methods and decide which one is best for you as a couple.
- Vasectomy carries less risk than tubal occlusion of getting pregnant again or of getting extra problems.

- Vasectomy is usually done under local anaesthetic.
- Tubal occlusion is usually done in hospital under general anaesthetic. You will usually leave hospital the same day.
- You must keep using contraception right up to the operation and for some time afterwards, either until after your first period or until you have a negative sperm test.
- It is not a good idea to have a tubal occlusion at the same time as a caesarean section, or immediately after giving birth or having an abortion. You may regret it later.

About this information

This information is for you if you:

- wish to use a permanent method of contraception; and
- have decided that you do not want more children or that you will never want children.

It tells you about two kinds of permanent contraception (known as 'sterilisation') for women and men. They are:

- tubal occlusion for women
- vasectomy for men.

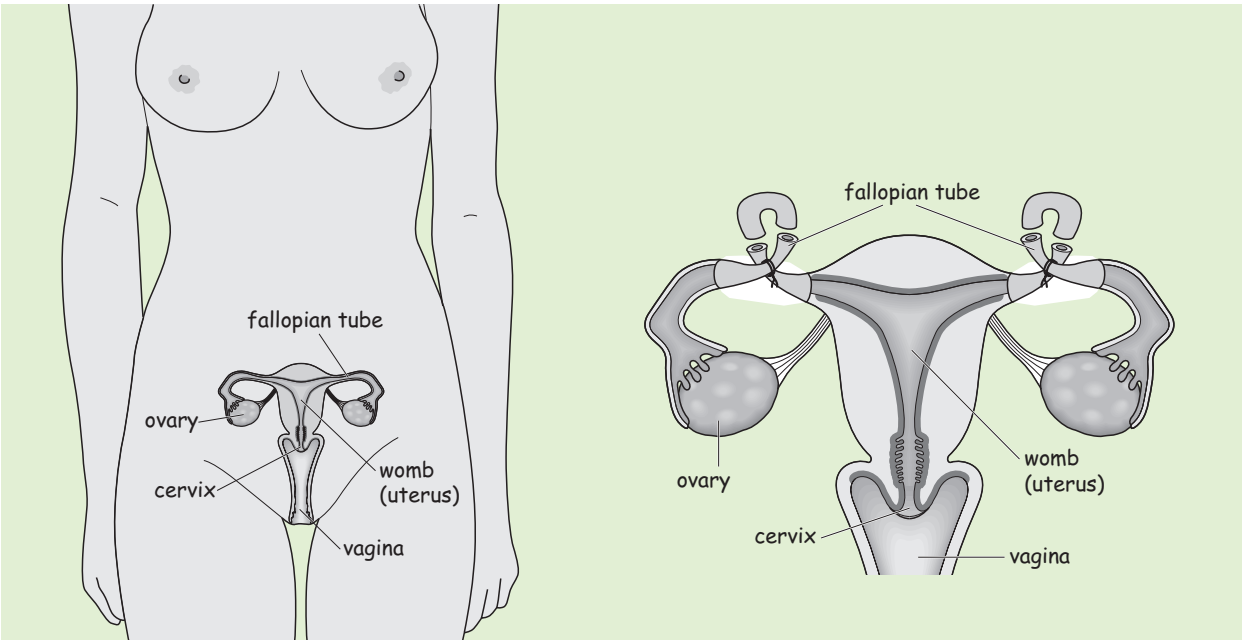
This information aims to help you and your health care team make the best decisions about your care. It may help you in deciding whether tubal occlusion or vasectomy is right for you and which method is most suitable for you and your partner (if you have one). It is not meant to replace advice from a doctor or nurse about your own situation.

This information covers methods and procedures available in the UK.

➢ Some of the recommendations here may not apply to you; this could be because of some other illness you have, your general health, your wishes, or some or all of these things. If you think the treatment or care you get does not match what we describe here, talk about it with your doctor or with someone else in your healthcare team.

What are tubal occlusion and vasectomy?

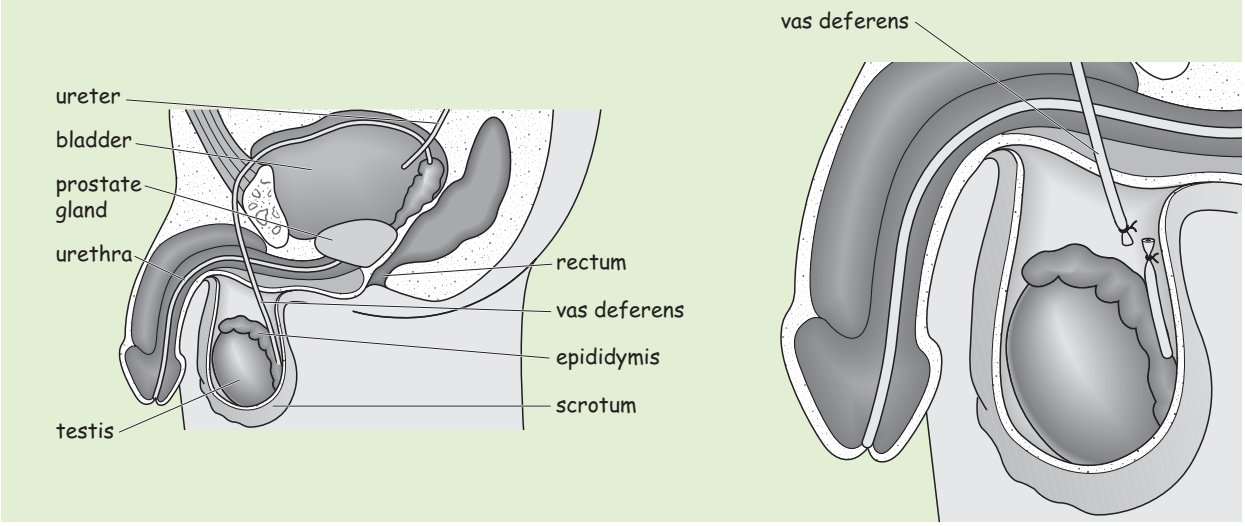
Sterilisation for women is known as tubal occlusion. Sterilisation for men is known as vasectomy. They are permanent ways of preventing pregnancy.



Tubal occlusion blocks, seals or cuts the fallopian tubes

Tubal occlusion is an operation which blocks, seals or cuts the fallopian tubes; this means that your eggs can no longer be fertilised by your partner's sperm through sexual intercourse.

Vasectomy is an operation which blocks, seals or cuts the tubes (known as the **vas deferens**) which carries sperm from your testicles to your penis. Although you will still be able to ejaculate, your semen will no longer contain any sperm, so you cannot make your partner pregnant. The sperm in your testicles are naturally reabsorbed back into the body and do not build up.



Vasectomy blocks, seals or cuts the tubes known as the vas or vas deferens

What do I need to consider?

You can have tubal occlusion or a vasectomy if you are sure that you do not want more children or that you will never want children.

If you have a partner you should discuss and agree together which option suits you best as a couple. Your doctor or nurse can talk to you about your choices and help you to come to a decision. Some couples, for example, choose vasectomy rather than tubal occlusion because the operation is less risky and there is less chance of getting pregnant again.

Research has shown that you are more likely to have regrets later on if you are under 30 or if you do not have children already. You need to be very sure about your decision and that you fully understand what it will mean. No one can force you to have the operation if you do not want to.

When someone is thought to be unable to make a decision for themselves (because they do not have the mental capacity to understand what is involved), their case should be taken to court for a judge to decide what is in their best interests.

Are there alternatives?

If you are a couple you need to consider both vasectomy and tubal occlusion.

Your doctor or nurse will also tell you about other long-term methods that women can use to avoid getting pregnant. These include:

- Copper IUDs (which used to be known as the coil) - the IUD (intrauterine device) is put into your womb and can safely stay there for up to eight years. If you are over 40 when it is fitted, it can be left in until you reach the menopause.
- A progestogen IUS (intrauterine system) - this is a hormone-releasing IUD which lasts for five years. The Mirena system is as effective as vasectomy and more effective than tubal occlusion.
- Progestogen implants – this uses a small flexible tube inserted under the skin of the arm to release the hormone progestogen. The implant lasts for three years.

The main advantage of these methods is that they can be reversed. Like tubal occlusion and vasectomy, they all have risks and benefits. Your doctor or nurse can tell you more about them.

How well does sterilisation work?

Sterilisation fails if the tubes that have been cut or blocked as part of the operation join up later on. You can get pregnant immediately or at any time (even several years) after a failed operation.

There is less chance of a pregnancy after a vasectomy than after a tubal occlusion. A pregnancy results for only one in every 2000 men who have been given the all-clear (that is, after tests have confirmed there are no sperm in their semen) after a vasectomy. It seems that the longer it is since you had your vasectomy, the lower the risk that your partner will get pregnant.

For all methods of tubal occlusion, there will be around one pregnancy in every 200 procedures that are carried out. Over a period of ten years, two or three out of every 1000 tubal occlusions done with Filshie clips (the most common method in the UK) resulted in pregnancy.

The main risk after a vasectomy is that your partner gets pregnant because you stop using contraception too soon after the operation; that is, before you have been told that it is safe to do so or before you have had a negative sperm test.

If you get pregnant after a tubal occlusion there is a chance that the pregnancy will develop in the fallopian tube rather than in the womb. This is called an ectopic pregnancy.

Can it be reversed?

All sterilisation operations are meant to be permanent. The chances of an operation to reverse it being successful vary a great deal. There is no guarantee of success. The best chances of successfully reversing a tubal occlusion seem to be when clips or rings have been used and when the reversal is done by microsurgery.

Tubal occlusion and vasectomy are free through the NHS but you will usually have to pay to have the operation reversed.

What happens first?

Your GP may refer you to a family planning clinic, directly to hospital or to an outpatient clinic. The doctor you see there to begin with may not necessarily be the surgeon who carries out the operation.

You will be asked about your medical history and whether you have had any operations before. If you are a woman you will have an internal examination and if you are a man the doctor will examine your genitals. The doctor will check for any conditions that might mean you would need to consider other alternatives.

The doctor should tell you more about what the operation involves and give you written information (or an audio or translated version) before you make a final decision. You should have a chance to talk about the operation in detail, to raise any questions or worries you may have and to think about what it will mean for you.

Tubal occlusion: What does it involve?

Tubal occlusion can be done using a general or local anaesthetic. You can have a tubal occlusion at any time in your menstrual cycle, as long as you have been using effective contraception right up to the day of the operation.

- You will be given a pregnancy test before the operation. However, it may not show up a very early pregnancy.
- To avoid getting pregnant you must keep using effective contraception until your first period after the operation.

The operation is usually done as a day case in hospital. That means you arrive and go home again on the day that you have the operation. In the UK most tubal occlusions are done under general anaesthetic. You may also be given a local anaesthetic during the operation to relieve any pain you might feel afterwards.

Your surgeon should tell you before the operation what methods they plan to use, and why, and what alternatives they will use if necessary. Afterward you should be told what methods were actually used for the operation. Surgeons occasionally find they need to use a different method from what they had planned.

The surgeon will make a tiny opening in your abdomen to reach the fallopian tubes. They will do this by either:

- **laparoscopy**: this is the most common method in the UK and is usually done under general anaesthetic. The surgeon will make two small cuts, one in or just below your navel and another lower down, to one side, or just above the bikini line.

or

- **mini-laparotomy**: this involves a slightly larger opening than for laparoscopy. In the UK it is usually only used if a laparoscopy is not successful. You are more likely to need it if you are very overweight or have had an operation on your abdomen before. You may need to stay in hospital a little longer than for laparoscopy (perhaps an extra day or so), because it takes longer to recover from a mini-laparotomy.

Once the surgeon has access to the fallopian tubes, they will usually seal them off with a clip known as a Filshie clip. Occasionally they may use diathermy to close off the tubes, if rings or clips have not been successful. This destroys part of the tube by heating and sealing it. It is harder to reverse than rings or clips.

A new method, known as hysteroscopic sterilisation, does not involve making any cuts. It is not yet widely available, as it is still being tested out. It cannot be reversed. The only hysteroscopic method used in the UK at present is the *Essure* method. The

surgeon inserts a tiny titanium coil into the fallopian tubes through the vagina and womb. Body tissue then grows around the coil and blocks the fallopian tube.

If you have a hysteroscopic sterilisation you must keep using contraception for at least three months after the operation, when you will have a test to check whether your tubes have been successfully blocked.

- It is best to give yourself time to think about what you want to do; don't rush into anything. Many women who have a tubal occlusion at the same time as a caesarean, or immediately after giving birth or having an abortion, have regrets later on . It also seems to lessen the chances of success.

If you do decide you want a tubal occlusion at the same time as a caesarean, your doctor or nurse should make sure that you have been given counselling and that you make the decision at least a week before your caesarean.

If you have a tubal occlusion at the same time as a caesarean, or if you have it done by mini-laparotomy after giving birth, the tubes will usually be cut and tied instead of being closed with clips. This is because in these circumstances ties give better results.

Tubal occlusion: What are the risks?

If tubal occlusion is done with diathermy and it fails, there is a greater risk of the pregnancy being ectopic (that is, it develops in the fallopian tube rather than in the womb).

- You should contact a doctor or nurse as soon as possible if:
  - you think you might be pregnant; or
  - you have sudden or unusual pain in your abdomen; or
  - you have any unusual vaginal bleeding; or
  - a light or delayed period.
- If you feel feverish or generally unwell or have increasing pain in your abdomen tell your doctor immediately.

A few women get extra problems (known as complications) during or after the operation. Your surgeon should tell you more about these risks. All operations carry some risk, but the risk of serious complications is low. You are most at risk of complications if you have had abdominal surgery before or if you are very overweight.

Most complications are minor and can be dealt with during the operation. Some, however, such as injuries to the bowel, bladder or blood vessels, can be more serious and as a result of them some women may need to have a laparotomy (which involves

making an opening in your abdomen through either a bikini line or a midline cut). Bowel injuries are rare but they can be very serious.

There is no evidence that having a tubal occlusion causes problems that would mean you need a hysterectomy.

There is no evidence that having a tubal occlusion affects your sex drive.

If you were on the contraceptive pill before your tubal occlusion your periods may become heavier again, compared to the withdrawal bleed you had while taking the pill. This is quite normal.

Research shows that if you are over 30 years old when you have a tubal occlusion, it is not linked to getting heavier or irregular periods. There is little evidence about how having a tubal occlusion affects your periods if you have the operation when you are under 30.

Vasectomy: What does it involve?

Vasectomy is usually done under local anaesthetic. General anaesthetic will usually be used if:

- you have a history of allergy to local anaesthetic
- you have a history of fainting easily
- you have had surgery before on your scrotum or genital area
- you do not want to have a local anaesthetic.

The surgeon will usually make one or two small cuts in the skin of your scrotum to reach the tubes (the **vas deferens**) which carry sperm. They will then block the tubes and close the ends, either by:

- cutting, removing a small part of the tubes and tying them; or
- using diathermy to heat and seal them off.

There is a small risk (about one in every 2000 vasectomies) that the tubes will reform some time after the operation. If this happens, you could make your partner pregnant.

The surgeon should usually use the 'no-scalpel' way of reaching the tubes. This avoids cutting the skin; the surgeon uses a special instrument to make a puncture and then stretches a small opening in the scrotum. This seems to cut down the risk of bleeding, infection and pain.

➢ You must use effective contraception before the operation and until follow-up tests show that the vasectomy has been successful.

To find out whether your vasectomy has been successful you will be asked to give at least one semen sample, at least eight weeks after the operation. Exactly how and when these tests are done will vary from area to area.

- If there are no sperm in your semen, the test result is negative. You should usually be told that you can stop using contraception.
- If you still have sperm in your semen, you should be given another test. You must wait until you get a negative test before you stop using contraception.

A few men continue to have small numbers of sperm in their semen, but these sperm do not move (they are known as 'non-motile' sperm). It is not always clear whether this means you could make your partner pregnant. If you are one of these men, your doctor will discuss your options with you.

Vasectomy: What are the risks?

There is no evidence that having a vasectomy affects your sex drive.

As an operation it carries less risk than tubal occlusion does for women.

Having a vasectomy does not increase the risk of getting testicular cancer or heart disease. Current research suggests that having a vasectomy does not increase the risk of getting prostate cancer.

Some men get pain in one or both of the testicles after a vasectomy. It can happen immediately or some time (even a few months) after the operation. It may be occasional or it may be quite frequent. Some men find the pain continues over time; this is known as chronic pain. For most men, however, any pain is quite mild and they do not need further help for it.

Is there anything else I should know?

- You have the right to be fully informed about your health care and to share in making decisions about it. Your health care team should respect and take your wishes into account.
- You will need to sign a consent form to show that you understand and agree to have the operation.
- All operations involve some risk. If you have special concerns about certain kinds of risk, let your doctors know so that they can tell you more.
- Sometimes extra procedures are necessary at the time of an operation to save a person's life or prevent serious harm to their health. Your doctor will

tell you about these. You have a right to say whether there are any procedures you do not want the surgeon to carry out.

- You should be told if there were any difficulties during the operation that mean it may not have been successful.
- You can find out more about what having an anaesthetic involves at: www.youranaesthetic.info

Other organisations

This organisation offers support.

fpa (Family Planning Association)
2–12 Pentonville Road
LONDON N1 9FP
Tel: 0845 310 1334
www.fpa.org.uk

Sources and acknowledgements

This information is based on the Royal College of Obstetricians and Gynaecologists (RCOG) guideline **Male and Female Sterilisation** (published by the RCOG and revised in December 2003). The guideline contains a full list of the sources of evidence we have used. You can find it online at: www.rcog.org.uk/mainpages.asp?PageID=498

Clinical guidelines are written for health practitioners. They are drawn up by teams of medical professionals and consumers' representatives who look at the best research evidence there is about care for a particular condition or treatment. The guidelines make recommendations based on this evidence.

This information has been developed by the Patient Information Subgroup of the RCOG Guidelines and Audit Committee, with input from the Consumers' Forum and the author of the clinical guideline. It was reviewed before we published it by 18 people attending clinics in Oxford and London. The final version is the responsibility of the Guidelines and Audit Committee of the RCOG.

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