Laparoscopic (Keyhole) sterilisation

What is Keyhole Sterilisation?

Keyhole sterilisation is a method of female sterilisation, carried out under general anaesthesia. A thin telescope called a laparoscope is used to look at the uterine (Fallopian) tubes then a small clip is applied to each tube. This blocks the tube, preventing either sperm or eggs from passing along the uterine tube, therefore avoiding pregnancy. Alternatively, both Fallopian tubes may be removed to effect the sterilisation.

Are these types of contraception permanent?

Yes. They should be considered to be permanent methods of contraception in women who have completed their families. A very small number of women may subsequently regret having been sterilised - this may be for very many different reasons. In such a case it may be possible to have an operation carried out to re-join the uterine tubes (when the clip method of sterilisation has been used). However, this surgery is a major undertaking with limited chance of conceiving afterwards. There is a high chance of an ectopic pregnancy (pregnancy growing outside the uterus) after reversal of sterilisation. The success rates for reversal procedures depend on many things, such as age, original method of sterilisation and the presence of other gynaecological problems. At present, the NHS rarely funds reversal procedures. Similarly funding for any post-sterilisation assisted conception treatment can only be decided by the local Clinical Commissioning Group (CCG).

Is the sterilisation operation always successful?

No. Every method of contraception carries a risk of failure and this is also true of female sterilisation. The possibility of getting pregnant after clip sterilisation is about **1 in 200 in 10 years**. This means that for every 200 women undergoing sterilisation, one may subsequently get pregnant. This may happen many years after the original operation and any woman who has been sterilised and who experiences any symptoms suggestive of pregnancy, such as a delayed period, should seek the advice of their doctor at the earliest opportunity. If pregnancy takes place there is a very high risk of an ectopic pregnancy and for that reason any confirmed pregnancy should be investigated early by a specialist in gynaecology.

Why might the operation fail?

The most common reason for the failure of sterilisation is the formation a new tubal opening in spite of the clip used to block the tubes during the operation. Failure may also be due to incomplete occlusion of the tube at sterilisation. The likelihood of this happening is said to be greater when a woman is sterilised just after a pregnancy. However, the use of sterilising clips is a safe method of sterilisation.

When both fallopian tubes are removed for sterilisation, the risk of failure is significantly less than for clip sterilisation.

Do the clips dissolve?

No. The clips are permanent. The material they are made from is inert and generally causes no reaction with body tissues. They do contain metal and can be seen on X-rays and may be noted if an X-ray is taken of the abdomen or pelvis for some other purpose later in life. They

do not cause problems with metal detectors at airports. Metal in the body can sometimes cause problems with certain types of scans carried out for medical purposes. You should always advise the X-ray department of your sterilisation operation if you are having any investigations carried out. The clips actually work by crushing and destroying the portion of tube to which they are applied. As a result, they may "drop off" the tube after a time and can occasionally be seen on X-ray pictures lying some distance away from the reproductive organs. This is a normal finding and does not indicate that the operation has failed. The clips do not cause any pain or problems when this happens.

Are clips always used?
No. In some cases it may not be possible to apply the clips securely to the uterine tubes so another method is used, usually diathermy. This uses heat to cauterise and seal a section of each uterine tube. In other cases, as earlier mentioned, the tubes may be removed.

Can the sterilisation operation always be carried out using the laparoscope?
No. On occasions, it may not be possible to carry out keyhole sterilisation. For some women it may be recognised before surgery that there are particular risks or difficulties in contemplating laparoscopy and an alternative method will be discussed. This would involve a more conventional operation, making a small cut in the lower abdomen. In this case the tubes are closed either by tying with a suture (stitch), then dividing them, or by using the clips mentioned previously or by removing both the tubes. Sometimes this may be necessary during a planned keyhole sterilisation because the uterine tubes cannot be seen with the laparoscope. The abdomen would then have to be opened to carry out the operation. This small possibility must be accepted if sterilisation is requested.

However, this is quite unusual, occurring in fewer than 1 in 100 patients. The two main reasons for this happening are where the abdomen is large or there has been previous abdominal or pelvic surgery.

Disadvantages of the open operation
The disadvantage of this method is that it requires an overnight stay in hospital and takes a little longer to recover at home afterwards than after keyhole sterilisation.

Should I stop contraception before the operation?
No. Although the operation is immediately effective, you should continue with your usual method of contraception until the first menstrual period after your sterilisation operation. This also applies to women taking the "Pill".

All women will have a pregnancy test before the procedure.

Where do the eggs go after this operation?
Nowhere really. The egg produced at ovulation cannot pass along the uterine tube. Each microscopic egg is absorbed and removed from the pelvis by normal body processes.

Does this sterilisation operation cause menstrual or other long-term problems?
No. There is no direct link between sterilisation and the development of later menstrual problems such as heavy, painful or irregular periods. Nonetheless, many women who undergo sterilisation may have taken the "Pill" for some years beforehand. The "Pill" tends to make the menstrual cycle very regular with periods that are lighter and less painful than they might otherwise be.

Consequently, when the pill is stopped, the pattern of menstrual loss returns to the way periods were, before taking the pill and may therefore become heavier again. In addition, there is a tendency for the menstrual cycle to become less regular with heavier and more uncomfortable periods with advancing age. There is no evidence that sterilisation has any negative long-term effect on health. By removing the anxiety about unplanned pregnancy, it may improve quality of life and be a positive factor in your relationships.

Are there any other benefits to being sterilised?
Sterilisation is an effective form of pregnancy prevention. Sterilisation either by application of Filshie Clips or removal of the fallopian tubes has been shown to also reduce the risk developing some types of ovarian cancer.

There is no evidence in having your tubes removed rather than clipped affects your ovarian function.

When can I get back to normal?
You may feel a little 'under the weather' for a few days afterwards. We recommend that if you do return home on the day of the operation you should rest that day. Thereafter you should avoid anything too strenuous or active for 2-3 days. Be guided by how you feel and use common sense in resuming normal activities. You may have to make arrangements for some extra help at home for 2-3 days, particularly if you are responsible for younger children. Sexual intercourse is best avoided for 1-2 weeks after surgery.

What alternatives are there to sterilisation?
There are many options available for reliable and effective contraception both for women and their partners.

A very reliable method of contraception which is not final, is an intrauterine contraceptive device containing progestogen (Mirena).

It is important to discuss alternatives with your own doctor, family planning adviser or gynaecologist before finally deciding on the most acceptable choice for you.

It's worth remembering that the equivalent operation in men - Vasectomy - is technically simpler, usually does not require general anaesthesia and has a much lower long-term failure rate (approximately 1 in 2000) than female sterilisation.

Still not sure?
Then don't be sterilised! If you are uncertain about proceeding with this permanent method of contraception it is best to use an alternative method until you are absolutely certain.

Useful Contact Numbers

Stoke Mandeville Hospital
Ward 16A 01296 418107/418108

Wycombe Hospital
Consultant Gynaecologists 01494 425009/425724

Please Note:

This leaflet explains some of the most common questions that some people may experience. However, it is not comprehensive. If you experience side-effects or want to ask anything else related to your treatment please speak to the staff on Ward 16A on 01296 418107/8.

How can I 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. Please follow our infection prevention and control guidelines when visiting our healthcare sites. Further information is available on our website.

Patient Advice Sheet

If you would like a copy of this information on audiotape, in large print or translated, please call the Patient Advice Liaison Service on 01296 831120 or email bht.pals@nhs.net

Division of Women, Children & Sexual Health Services

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