Intrauterine System

The intrauterine system (IUS) is a very effective method of contraception. It is also used to treat heavy periods (menorrhagia). Each device works for five years. The IUS available in the UK is the Mirena® IUS.

What is the intrauterine system?
The IUS is a small, plastic, T-shaped device. There are threads attached which will lie in your vagina (see diagram below). These allow you to check it is still there. They also mean it can be removed easily. It is put into a woman's womb (uterus) by a doctor or nurse. It looks like an intrauterine contraceptive device (IUCD) - also known as the contraceptive coil. It also contains progestogen hormone, so it is called an intrauterine ‘system’ (IUS) and not an IUCD. An IUS works for five years before it needs replacing.

Mirena® is the only IUS available in the UK, although others may become available in the future.

How does the intrauterine system work as a contraceptive?
It works differently to a coil because of the progestogen hormone. The hormone thickens your mucus. This forms a plug in the cervix. This stops sperm getting through to the womb to fertilise an egg. The hormone also makes the lining of your womb thinner. This makes it unlikely that a fertilised egg will be able to implant there. It may also have some effect on ovulation (the release of the egg each month). It may not occur.

How effective is the intrauterine system for contraception?
It is very effective. Around 2 women in 1000 using the IUS will become pregnant each year. (Compare this to when no contraception is used. More than 800 in 1000 sexually active women who do not use contraception become pregnant within one year.)

What are the advantages of the intrauterine system?
- Once it is inserted you can forget about contraception for five years. It does not interfere with sex.
- Periods usually get lighter, less painful and often stop (unlike the coil). After 12 months most users only have a light bleed for one day per month, and about 1 in 5 users have no bleeding at all.
- Fertility returns as soon as it is removed.

The IUS does not have to be used as contraception. It can also be used as a treatment for heavy periods, endometriosis and fibroids.

What are the disadvantages of the intrauterine system?
Although the majority of women with an IUS have no problems, the following may occasionally occur:
- You may have irregular bleeding for the first three to six months. This usually settles down. It is usually a light 'spotting' of blood which women can find a nuisance.
- The IUS may come out without you noticing (expulsion). This happens to 1 woman in every 20. It usually happens in the first three months during your period.
- Fitting an IUS can very rarely cause damage to the womb. In less than 1 woman in every 1,000 the IUS may go through the wall of the womb (perforation).
Are there any side-effects?

Side-effects are uncommon. The progestogen released by the IUS mainly stays around the uterus and very little gets into the bloodstream. So side-effects are less common than with the progestogen-only contraceptive pill and the contraceptive injection or implant.

If side-effects do occur, they tend to develop in the first 3-6 months. They then tend to ease and go. Examples of possible side-effects include: mood swings, reduced sex drive, fluid retention, increase in acne and breast discomfort.

There is no evidence that women with an IUS put on weight.

Who cannot use the intrauterine contraceptive system?

Your doctor or family planning nurse will discuss your medical history. Some illnesses may mean you cannot use progestogen-based contraceptives, such as the IUS. These include recent (in the preceding five years) breast cancer, very large fibroids or an infection which has not been treated. In practice, the number of women who cannot have the IUS inserted is small.

How is the intrauterine system fitted?

This is usually done towards the end of your period, or just afterwards. However, it can be fitted at any time provided that you are certain you are not pregnant. You will need to have a vaginal examination. The doctor or nurse will pass a small instrument into your womb to check its size and position.

The device is then directed through your cervix and into your womb.

You will be taught how to feel the threads so you can check it is in place. It is best to check the threads regularly - for example, once a month just after a period.

If it is fitted within seven days after the start of a period, it is immediately effective as a contraceptive. If it is fitted after the 7th day then you need to use extra protection such as condoms for seven days.

The procedure can be uncomfortable. Just after the device is fitted some women have crampy pains like period pains for a few hours. These can be eased by painkillers such as paracetamol or ibuprofen. Light vaginal bleeding may also occur for a short while.

Follow-up

The doctor or nurse will usually want to check that there are no problems after your first period. After this, there is no need for any routine check until it is time to remove the IUS. However, see your doctor or nurse at any time if you have any problems or queries.
Most women have no problems and the IUS can remain in place for five years. It needs to be replaced after five years if you wish to continue with an IUS. It can be removed at any time by a trained doctor or nurse.

You will be able to get pregnant as soon as it is removed. If you plan to have it removed, but do not want to get pregnant, then use other methods of contraception (such as condoms) from seven days before it is removed. This is because sperm can last up to seven days after having sex.

You can still use sanitary towels or tampons when an IUS is in place.

You should consult a doctor if any of the following occur:

- Prolonged abdominal pain after an IUS is inserted.
- Vaginal discharge with or without pain. This may indicate infection.
- If you suspect that the IUS has come out or is coming out. It is usually possible to feel the threads of the IUS inside your vagina. If you cannot feel the threads then use other contraception (such as condoms or not having have sex) until you have been checked by a doctor or nurse.

Further information

Your GP and practice nurse are good sources of information if you have any queries.

The fpa (formerly the Family Planning Association) also provides information and advice. fpa’s Helpline: 0845 310 1334 or visit their website www.fpa.org.uk

Further reading & references

- Intraterine Contraception, Faculty of Sexual and Reproductive Healthcare (2007)
- Contraception - IUS/IUD; NICE CKS, June 2012

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