



Sandwell and West Birmingham  
NHS Trust

# **Mirena and Levosert**

## Levonorgestrel Releasing Intrauterine System (LNG-IUS)

Information and advice for patients

**Gynaecology**

## **What is an IUS?**

An intra-uterine system (IUS) is an implant made of plastic and containing a synthetic form of the hormone progesterone. It is placed in your uterus (womb) to prevent you from becoming pregnant. An IUS can also be used to relieve the symptoms of heavy periods.

An IUS provides three layers of protection. It works by physically blocking sperm from fertilizing an egg. The plastic body of the IUS is toxic to sperm and your egg. The hormone changes the lining of your womb, preventing a fertilized egg from implanting.

Currently in the UK there are 2 products available: Mirena and Levosert. Both contain 52mg levonorgestrel (synthetic progestogen) in a reservoir and release 20mg per 24 hours. Both are licensed for contraception and treating heavy menstrual bleeding. Mirena is also licensed for endometrial (womb lining) protection in women using oestrogen replacement.

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, ask your doctor or nurse specialist.

## **What are the benefits of an IUS?**

IUS is a non-permanent (reversible) method of female contraception with life span of 5 years. Your doctor can remove it at any time you choose. The failure rate of IUS is approximately 1 in 1000 over one year (the failure rate of female sterilization is approximately 5 in 1000 over one year).

IUS is also licensed to treat heavy menstrual bleeding. It is commonly used to treat non-atypical endometrial hyperplasia (mild pre-cancerous changes in the womb lining) however, it is not licensed for this indication but research showed that it gives good results.

## **Are there any alternatives to IUS?**

Heavy periods can be treated using a variety of non-hormonal and hormonal oral (by mouth) medications. It is possible to have surgery to remove the lining of your womb (endometrial ablation) or to remove your womb (hysterectomy). However, IUS is considered the first treatment choice.

## **What does the procedure involve?**

### **Before the procedure**

Let your doctor know your monthly cycle and if you have any unusual bleeding or discharge. Your doctor may ask you to have a pregnancy test. Sometimes the test does not show an early-stage pregnancy so let your doctor know if you could be pregnant.

Your doctor 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.

### **In the clinic**

Your doctor will insert a speculum (the same instrument used for a smear test) into your vagina. They may clean your vagina and cervix with an antiseptic solution.

Your doctor will use forceps to hold your cervix steady and will use a small device to measure your womb.

Let your doctor know if any part of the procedure is uncomfortable or painful. If your neck of the womb is stenosed (narrow), you may be offered local anaesthetic injection.

Your doctor will place the IUS inside your womb. They will cut the strings used to remove the IUS, leaving about 3 centimeters of the strings deep inside your vagina. They will remove the forceps and speculum.

## **What complications can happen?**

The healthcare team will try to make the procedure as safe as possible but complications can rarely happen. The possible complications of an IUS are listed below. Your doctor may be able to tell you if the risk of a complication is higher or lower for you.

- Vaso-vagal attack (Cervical shock) where your heart rate slows down and you may faint. This can happen if your body reacts when the measuring device or IUS passes through your cervix. The healthcare team will monitor your heart rate and blood pressure till you recover. This may take 10 minutes.
- Lost strings (risk 2-3%) if your doctor cannot feel or see the strings at the top of your vagina. You will need an ultrasound scan to check that the IUS has not fallen out and your doctor may ask you to have a pregnancy test. We advise that you see the practice nurse after 6 weeks of insertion to check the strings (if the IUS gets lost, this usually occurs in the first few weeks).
- Making a hole in your womb (risk: less than 2 in 1,000) you may need to go to hospital for close observation in case you develop complications. You may need an operation to remove the IUS and repair your womb.
- Infection (risk: less than 1 in 100 in the first 20 days). You may be given antibiotics to reduce this risk. Let your doctor know if you get an unpleasant-smelling discharge or bleeding that settles and then gets worse.
- Increase in period pain and bleeding. In the majority of women, this will settle within the first 3-6 months of insertion. Sometimes the IUS can also make you bleed between periods. In the first year, up to 1 in 5 women have the IUS removed.
- Hormonal side effects such as gaining weight, feeling sick, headache, breast tenderness, bloating and mood changes. If this does not settle, you may choose to have the IUS removed (risk is 1 in 10).
- Pregnancy problems, if you become pregnant with the IUS in place. You will have a higher risk of having a miscarriage or an ectopic pregnancy (where a pregnancy happens outside your womb, usually in a fallopian tube). These problems can cause serious complications. Let your doctor know if you think you might be pregnant or if you have pain or bleeding.
- It is possible in rare cases for the coil to move outside of the uterine cavity, become embedded or "get stuck" in the lining of the womb

## **How soon will I recover?**

You will have some vaginal bleeding and mild cramping that should last for only a few days as your body gets used to the IUS.

You should be able to return to work and normal activities straight away.

While you are bleeding use sanitary pads, not tampons. Do not have sex, swim or do strenuous exercise during this time.

We advise that you see the practice nurse after 6 weeks of insertion to check the strings (if the IUS gets lost, this usually occurs in the first few weeks). If you feel comfortable doing so, you can feel for the strings yourself. If you cannot feel the strings, let your doctor know as the IUS may have fallen out.

## Further Information

National Institute for Health and Care Excellence (2018). Heavy menstrual bleeding: assessment and management. [NG88]. Available at: <https://www.nice.org.uk/guidance/ng88> (Accessed 11 January 2021).

Faculty of Sexual and Reproductive Healthcare of the Royal College of Obstetricians and Gynaecologists (2015) Intrauterine Contraception. Available at: <https://www.fsrh.org/documents/ceuguidanceintrauterinecontraception/fsrh-guideline-intrauterine-contraception-sep-2019.pdf> (Accessed 11 January 2021).

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

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