



The Levonorgestrel Intrauterine System



What is the levonorgestrel intrauterine system?

The levonorgestrel intrauterine system (IUS) (Mirena®) is a new intrauterine contraceptive approved by the US Food and Drug Administration in December 2000. The contraceptive is quite small (about 1 1/4" tall and wide), made of plastic, and shaped like the letter "T" (see photo). Inside, it contains a synthetic female hormone, levonorgestrel, which is released slowly into the uterus (womb), helping to prevent pregnancy. This hormone acts like the natural hormone progesterone and is widely used in implants and oral contraceptives.

How thoroughly was the product tested?

The levonorgestrel IUS has been available in Europe for more than 10 years. Worldwide, the IUS is available in more than 50 countries. Almost 2 million women have used this intrauterine contraceptive.

How does the system work?

Scientists believe that intrauterine contraceptives work in many ways, all of which are not fully understood. Research suggests that contraceptives placed inside the uterus work mainly by preventing fertilization, interfering with the normal development of the egg and the sperm's ability to reach and penetrate the egg. The hormone in the IUS also helps prevent the release of an egg and makes the cervical mucus thick. Stated another way, this method is a true contraceptive: it prevents pregnancy from occurring.

How effective is the IUS?

The IUS contraceptive is one of the most effective reversible contraceptives on the market today. During the first year of use, only 0.1% of women using the method will become pregnant. Over a period of 5 years, fewer than 1% of users will get pregnant. This makes the levonorgestrel IUS as effective as female and male sterilization—with the advantage of being reversible.

Are there side effects?

Changes in menstrual bleeding patterns are the most common side effects of the IUS. During the first 3 to 6 months of use, the number of days of bleeding and spotting increases and bleeding patterns become irregular. After 3 to 6 months, however, bleeding and spotting usually lessen quite a bit. Women may have only 10% of their usual blood loss during their periods. About 20% of women will have no bleeding after 12 months, a side effect many women like. These bleeding changes are *not harmful* and have the benefit of making women less likely to be anemic. Other side effects include lower abdominal pain or cramping, reported by about 10% of users during the first 3 months. Side effects occurring in fewer than 5% of women include acne or other skin problems, back pain, breast tenderness, headache, mood changes, and nausea. Note: This material is not under copyright. Feel free to duplicate and distribute to your patients.

What are the advantages of using an intrauterine contraceptive?

Intrauterine contraceptives are safe, effective, easy to use, and less expensive over the long run than most other forms of contraception. Remembering to use the method every day or with every act of sex is not necessary. The levonorgestrel IUS is approved for up to 5 years of use, although it may work even longer.

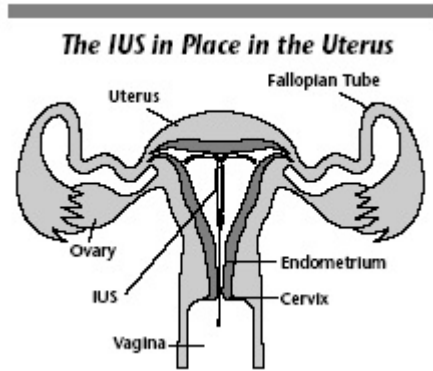
Does the IUS have any health benefits?

Yes, the levonorgestrel IUS decreases menstrual flow for most women and can help treat those who have heavy bleeding. This contraceptive also greatly reduces menstrual cramps and may help women avoid having their uterus surgically removed (hysterectomy) because of severe bleeding problems.

Who can use the IUS?

The best candidates for the IUS are women who:

- have a normal uterus;
- do not have any genital tract infection or sexually transmitted diseases (STDs) now or within the past 3 months; and,
- are at low risk of STDs (in a steady, faithful relationship with one partner who has no infection and no other partners).



What is it like to have an IUS inserted?

Having an IUS inserted takes only about 5 to 10 minutes. Your clinician will perform a pelvic examination to measure the size, shape, and position of your uterus. An antiseptic solution is applied to the cervix, and then the IUS is put inside using a special inserter that holds it flat and closed until it reaches the top of the uterus. At this point, women may feel cramping; however, the cramping is usually mild to moderate. After the device is in place, the string at the end of the IUS will be cut short enough so that it does not bother you or your partner.

Most women have little discomfort wearing an IUS; however, it can take time for your body to adjust. Uterine cramps (like menstrual cramps) or low backache might occur at the time of insertion. An over-the-counter medicine, such as ibuprofen or naproxen, is usually enough to relieve the pain.

Where to Get the Levonorgestrel IUS

*Your doctor's office
Your nurse-midwife or
nurse practitioner
Your local family
planning clinic
The County or City
Health Department*

When should I call my clinician?

If you have a fever or chills with pelvic pain or tenderness, severe cramping, or unusual vaginal bleeding, contact your clinician because you may have an infection. A slightly increased risk of infection exists during the first 3 weeks after putting in the IUS. After that, the risk is very low.

Can the IUS fall out of the uterus?

It is possible, although rare, that the IUS can become dislodged. If you or your partner can feel the plastic part of the device, it means your IUS has slipped out of place. If you have any doubts about the presence or position of your contraceptive, use latex condoms for birth control and call the office or clinic for instructions or an examination.

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