

## MIRENA INTRAUTERINE DEVICE

**What is Mirena?** It is a small device that is fitted into the uterus, where it releases a hormone called progesterone (levonorgestrel- LNG), to prevent pregnancy. It can also be used after menopause as a source of progesterone hormone for women taking hormone replacement therapy. It is T-shaped and made of plastic and can prevent pregnancy for up to 8 years. The progesterone is released gradually from the sleeve around its stem, and it has 2 fine threads attached to the base for easy removal, when required. Mirena has 52mg of LNG, released at a rate of 20mcg/day, but decreases to 10mcg/day after 5 years. If Mirena is used to control bleeding, then it should be replaced every 5 years.

**How effective is Mirena?** It is 99.9% effective at preventing pregnancy and is reliable as permanent contraception, i.e. vasectomy and sterilisation. It is however, 100% reversible and may be removed at any time.

**How does it work?** Once inside the uterus, Mirena prevents pregnancy by:

- Thickening the mucus from the cervix so that sperm cannot penetrate it and enter the uterus.
- Prevents the normal sperm function inside the ovaries and fallopian tubes.
- Reduces the monthly growth of the lining of the uterus, making it unsuitable for pregnancy. This also makes the period much lighter and shorter.

**How is it inserted** Mirena requires insertion by a qualified medical practitioner. It will be placed into the uterus through the vagina. It comes specially packaged in a sterile insertion tube so it can slide through the cervix and be released into the uterus. The Mirena then opens into its T-shape. This process is like an extension of a Cervical Screening Test/ Papsmear. It may be inserted under local anaesthetic but there can be discomfort and light-headedness during this 5-10 min procedure, or a patient may elect to have intravenous sedation for a pain-free insertion. With sedation, you are asleep but still breathing on your own. An oxygen mask is placed on your face and sedation medication is given to you via a cannula placed in a vein. This makes for a painless insertion. You stay for approximately 1 hour post insertion and you will need someone to pick you up as you cannot drive a motor vehicle until the next day.

You need to also fast for 6 hours prior to insertion but may drink water only up until 2 hours before your appointment. The insertion under sedation may be organised at any GCA centre. There may be some cramping after insertion, particularly if it is the first Mirena for you. It comes prepared in quite a large box. Do not be alarmed by this, as most of the packaging is the insertion apparatus and will be discarded after insertion.

**When is it inserted?** After you have made an appointment, if you are not using any contraceptive, you will need to abstain from any intercourse for 3 weeks prior to your insertion. If you already have one in place and you need replacement, you can have it replaced at any time and do not need to abstain. It is best to wait 4-8 weeks after childbirth, miscarriage or termination of pregnancy before insertion. Ring a GCA centre day 1 of your next menstrual period to organise a date for insertion.

**How does it affect periods?** Periods tend to become shorter and lighter. Many women have spotting or light bleeding in addition to their periods in the first 3-6 months. Overall, the number of bleeding days and amount of blood loss is reduced each month after insertion. More than 20% of women stop periods altogether after 12 months. Additionally, after the second year of use, with the second Mirena, up to 60% of women reported that their periods stopped altogether. Periods will return to normal once Mirena is removed.

**Can it be removed before 5-8 years?** It may be removed at any time with reversal of any contraceptive effect or side effects. If you do not wish to become pregnant, it is important to use another reliable method of contraception in the week leading up to the removal. Sex during this week could lead to pregnancy after the IUD is removed.

**What if a period is missed?** This is very common so don't be alarmed. It is normal for periods to become much lighter and shorter. More than 20% of women stop having periods altogether. The longer the Mirena is inserted the less likely you are to bleed. If you stop having periods, this is very safe and, in fact, beneficial to your health. It reduces the risk of uterine cancer. **PTO**

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It is very rare for a woman to become pregnant with Mirena. If you think you may be pregnant, see the doctor as soon as possible. If you do not have it removed, you may increase the risk of miscarriage or infection. Also, the effects of Mirena on pregnancy are not fully known.

**Is it safe during lactation?** Mirena releases the hormone progesterone, which is the same hormone in the "Minipill". Progesterone is safe and does not affect the milk supply, therefore it may be used whilst breastfeeding.

**What are the unwanted effects (side effects)?**

Side effects are less common than other forms of hormonal contraception because the hormone progesterone tends to work more locally within the uterus and less is absorbed systemically. Some side effects may occur, eg. depression (2.9%), acne (2.3%), headache (1.9%), weight change (1.5%), nausea (0.8%), facial hair growth (0.7%). If these side effects occur, they should go away after a few months. Mirena should not increase the risk of pelvic infection or ectopic pregnancy, but it should not be inserted if you already have an infection, eg. chlamydia or gonorrhoea.

**Who is suitable for Mirena?**

It IS suitable for women who:

- Have heavy, painful periods
- Are unable to take oestrogen
- Wish to have effective long-term but reversible contraception
- Have difficulty remembering to take the oral contraceptive pill
- Are approaching menopause

It MAY NOT be suitable for women who have:

- Unexplained vaginal bleeding
- A recent history of PID (pelvic inflammatory disease)
- A high risk of STI's or are likely to have more than one sexual partner or have a partner with more than one sexual partner
- Some uterine or cervix abnormalities
- Have difficulties with vaginal examinations or procedures. These women may require intravenous anaesthesia for its insertion.

Mirena IS NOT suitable for women who have:

- Recently had breast cancer
- Some other forms of cancer

**Are there any complications with insertion of Mirena?**

- Some women may complain of cramping and bleeding for 1-2 weeks. Simple pain relief medication may be required, eg. Paracetamol, Nurofen, Naprogesic.
- Some light-headedness may occur during insertion (if inserted under local anaesthetic only) but this feeling passes quickly.

- Expulsion of Mirena. Sometimes the uterus may expel the device. This is more common in younger women who have never had children. The incidence is approximately 5%. It is important to check the string after each period, particularly in the first few months after insertion.
- Uterine perforation. This is a rare complication (2 in 1,000) of insertion of intrauterine devices. The device may pass through the wall of the uterus into the abdominal cavity, usually at the time of insertion. This may or may not require surgery to repair the hole or remove the device or both. Before insertion of Mirena, the cervix is gently dilated (stretched open) to allow insertion of Mirena without any undue force, thereby reducing the incidence of this complication.
- PID (Pelvic Inflammatory Disease). This is another rare complication of Mirena insertion, most likely to occur in the first few weeks after insertion. It is most likely related to exposure to sexually transmitted infections, eg. Chlamydia and gonorrhoea. These infections may lead to infertility if not treated properly.
- Miscarriage / Ectopic pregnancy. If a woman becomes pregnant with Mirena, the risk of miscarriage increases. The device should be removed as soon as possible. Ectopic pregnancy (pregnancy in Fallopian tube) is extremely rare with Mirena but may occur. Ectopic pregnancy is a serious medical condition. If you suspect you are pregnant, see your doctor as soon as possible.

**What do I need to do after insertion?**

- You may need to take some pain relief medication for cramps and take it easy for the rest of the day.
- Don't put anything into the vagina for 2 days, eg. tampons, sex, swimming, bathing, douching.
- Contraceptive effect is immediate when insertion is within 7 days of the first day of the last menstrual period, but no intercourse for 2 days after insertion.
- You should see your doctor for a check up 6 weeks after insertion.
- You should ring us, at any time, if you have any concerns. Please call us first.
- It is important to keep a record of the date when replacement is due and arrange this before the actual expiry date.