



Long acting reversible contraception: giving women knowledge and options

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Case

MB, 28 year old attends requesting contraception. She has one child aged 4 years and is in a stable relationship. She has epilepsy which is well controlled on Carbamazepine. She has a regular 28 day cycle and her periods are light. What are her choices?

The median age for first sex in women in Ireland is 18 years and the average age of menopause is 51 years so many women will need contraception for more than 30 years of their life.¹ They will want a contraceptive that is safe, reliable and easy to use and that suits their lifestyle. When asked to prescribe contraception, healthcare professionals often only think about the pill. However there are many other options that we should be informing women about in order to increase the range of options available to them. The so called LARC methods (Long acting reversible contraception) are increasing in popularity amongst women and have several advantages over pills or barrier methods. The LARC methods discussed in this article are:

- Levonogestrel releasing intrauterine system (LNG-IUS), ie. Mirena,
 - Copper releasing intrauterine device (Cu-IUD),
 - Progesterone subdermal implant (Implanon NXT)
- Depo medroxyprogesterone (Depo Provera) was previously included as a LARC but it has been shown to reduce bone density so is no longer recommended for long term use. However, it is still considered a really good contraceptive option and can be used for up to two years in women with no risk factors for osteoporosis.

All the LARC methods have lower failure rate than barrier methods and hormonal pills. User error contributes to the failure rate of combined oral contraceptive (COC), progesterone only pill (POP) and barrier methods. With perfect use (following directions for use), the failure rate of the COCs

is .3% and with typical use (actual use including inconsistent or incorrect use) is 9%.² LARCs are known as “fit and forget” methods as they do not rely on the user to remember to use them or take them. The progesterone implant and LNG-IUS (Mirena) have failure rates comparable to sterilisation and thus offer a reliable alternative to sterilisation.³ The LARC methods do not contain oestrogen and so they are useful for women with co-morbidities that contraindicate oestrogen. LARC also have non contraceptive benefits and the LNG-IUS is licensed for use in menorrhagia. Although the up-front cost of insertion may put some women off these methods, they can be reassured that all LARC methods are more cost effective than the combined oral contraceptive even at one year of use.⁴

LNG IUS

The primary mode of action of the LNG IUS is endometrial atrophy, preventing implantation. Secondary effects include a cervical mucus affect and ovulation suppression. The LNG IUS has a pregnancy rate of fewer than 5 in 1000 over 5 years so it is a very reliable contraceptive.⁴ LNG-IUS is licensed for 5 years of use as a contraceptive. Randomised trials show that LNG IUS provides effective contraception for up to 7 years and the Faculty of Reproductive and Sexual Health (FRSH) in the UK has recommended that women who have the LNG IUS inserted at or after the age of 45 years and are amenorrhoeic may retain the device until the menopause is confirmed.⁵ The LNG-IUS is also licensed as a treatment for menorrhagia and is being used increasingly for this indication. Endometrial pathology must be excluded prior to insertion for this indication in women over 40. LNG-IUS may be used to prevent endometrial hyperplasia when using oestrogen only hormone replacement therapy (HRT). The benefit of this is that if a woman with a LNG IUS in situ develops menopausal symptoms, she may leave the LNG IUS in situ and commence oestrogen only HRT. Women who are using the LNG-IUS as the progesterone component of HRT must change the device every 5 years as per the licence.

Pre-insertion counselling must include a discussion about

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the risk of perforation, expulsion and lost threads as well as bleeding problems and hormonal side effects. Irregular, light or heavy bleeding is common in the first 6 months following insertion of the LNG IUS. Continuation rates may be improved if women are counselled in advance to expect these side effects. Approximately, 65% of women are amenorrhoeic or have light bleeding at one year following insertion. Women should be taught how to check for threads. The risk of sexually transmitted infections should be assessed prior to insertion and a test for chlamydia may be done by sending a first pass urine or endocervical swab.

Cu IUD

The primary mode of action of the Cu IUD is a toxic effect on ovum and sperm, preventing fertilisation. They also have an endometrial effect that prevents of implantation and an effect on cervical mucus that affects sperm penetration. The pregnancy rate is fewer than 20 in 1000 over 5 years.⁴ GPs in Ireland don't often offer CU-IUDs to women although this is a very popular method in the UK. Spotting, heavier or longer periods are common the first 3-6 months following insertion. Cu IUDs can be offered as a good option to women who have light periods and who want a completely hormone free method.

Insertion of a CU-IUD is the most effective method of emergency contraception and can be inserted up to 5 days post unprotected sexual intercourse or they can be fitted up to 5 days post earliest expected day of ovulation in a woman with a regular cycle irrespective of when UPSI occurred in the cycle (for example up to day 19 in a woman with a regular 28 day cycle).⁶ As the risk of STI may be higher in this situation, prophylactic antibiotics may be considered. The CU-IUD can be removed at next menses or can be left in situ if the woman requires long term contraception

GPs who insert Cu-IUDs can order them directly from medical supply companies, either singly or in bulk. Insertion is covered by the GMS STC form but the device itself is not available on the GMS. The gold standard device is the Cu T 380 S and this lasts for twelve years and costs about €25. It is now accepted practice that a woman who has a CU-IUD inserted at the age of 40 or over can retain the device until menopause is confirmed.

Myths dispelled

There are many myths surrounding the use of IUDs and IUS and it is important that healthcare professionals help dispel these myths.

Contrary to myths, Cu-IUD and LN – IUS can be safely offered to nulliparous women. Another myth is that these devices must be inserted during menstruation. In fact they can be inserted at any time in cycle once the doctor is reasonably certain that the woman is not pregnant.⁴ Many doctors now choose to prescribe an anovulant method of contraception such as COC or the desogestrel containing POP (Cerazette) as a bridging

method before bringing the woman back to insert the device at a time that suits both doctor and patient.

Progesterone subdermal implant

The progesterone subdermal implant (Implanon NXT) is a single rod, measuring 40mm by 2mm, which is inserted subdermally in a woman's upper arm. Etonogestrel is released from Implanon NXT in a controlled fashion over 3 years. It primarily acts by inhibiting ovulation but in the third year the secondary effect on the cervical barrier is an important secondary effect. It is an extremely effective contraceptive and the pregnancy rate is fewer than 1 in 1000 over 3 years.⁴ The device is inserted with a small amount of local anaesthetic. Removal involves a small incision and the ease of removal is related to the insertion. A deep implant may require ultrasound guidance for removal. The bleeding pattern post insertion is variable and pre insertion counselling should aim to achieve a realistic expectation. NICE guidelines state that at one year post insertion, 20% of women are amenorrhoeic and 50% of women have infrequent, frequent or prolonged bleeding which may not settle with time.⁴ The efficacy of the device is reduced by enzyme inducing drugs including St John's Wort. Like the IUS and IUD, Implanon NXT can be inserted any time in the cycle once you are reasonably certain that the woman is not pregnant.

When women attend a health professional requesting contraception, they should be given information on all types of contraception, including risks and benefits of each method. Information for health professionals on all types of contraception can be found on the excellent website of the Faculty of Sexual and Reproductive Health www.fsrh.org. Patient information leaflets on all types of contraception are available to download at the UK Family Planning Association website. <http://www.fpa.org.uk/helpandadvice/contraception>.

Case

MB is on Carbamazepine, an enzyme inducing drug so the COC, POP and Subdermal Implant cannot be used. The LNG-IUS and CU-IUD are good options. I would counsel this lady about both these methods and give her information leaflets about both methods. Once she has chosen which device she wants, I would examine her, send a test for chlamydia and plan the insertion.

References

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