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Guidelines for the use of Nexplanon Subdermal Contraceptive Implant

A clinical guideline recommended

For use in:	Gynaecology Services
By:	Gynaecologists, GPs, Nurses
For:	Use of subdermal contraceptive implant
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1. Introduction

Nexplanon comprises a single subdermal rod and is licensed for 3 years use. It replaced Implanon in 2010 as the only progestogen releasing subdermal contraceptive implant (SDI) in use in the UK., Nexplanon is radio-opaque, non-biodegradable and contains 68 mg of etonorgestrel.[1,2,]

2. Eligibility

Health professionals inserting subdermal contraceptive implants should be familiar with the *UK Medical Eligibility Criteria for Contraceptive Use* (UKMEC) recommendations.[3] For most women, Nexplanon is a safe option. The only UKMEC Category 4 (unacceptable risk) is current breast cancer. For UKMEC 3 (risks usually outweigh benefits), UKMEC 2 (benefits outweigh risks) and UKMEC 1 (unrestricted) conditions, practitioners should refer to the UKMEC 2016 which can be accessed at www.fsrh.org.

3. Clinical assessment

- A clinical history (including sexual history) should be taken as part of the routine assessment to assess the appropriateness of an SDI.
- Exclude allergy/sensitivity to levonorgestrel, previous implant, local anaesthetic and latex.

4. Information for women considering an SDI

- **Mode of action**

The primary mode of action of an SDI is prevention of ovulation. In addition, implants also alter cervical mucus thus preventing sperm penetration and inhibit normal endometrial development.

- **Failure rate/efficacy**

The failure rate for SDIs is very low and at 3 years is less than 1 in 1000. Women with a BMI of > 30 kg/m^2 can use a progestogen only implant without restriction and without reduction in contraceptive efficacy for the duration of licensed use.

The rate of etonorgestrel release decreases with time from approximately 60–70 µg/day in weeks 5–6 to approximately 25–30 µg/day by the end of the third year.

No increased risk of pregnancy has been demonstrated in women weighing up to149 kg. However, because of the inverse relationship between weight and serum etonogestrel levels, a reduction in the duration of contraceptive efficacy cannot be completely excluded.

Women using the progestogen-only implant should be informed, where relevant, that the manufacturer states that earlier replacement can be considered in 'heavier' women but that there is no direct evidence to support earlier replacement.[1]

- **Duration**

Women should be informed that the SDI is licensed for 3 years of use as a contraceptive.

In the event of suspension of routine clinical services during the Covid 19 pandemic, women should be advised that contraceptive implants such as Nexplanon do not cause health problems if used for longer and are likely to be effective for 4 years. If there is any concern on the part of the woman or the practitioner, a progestogen only pill can be prescribed or condoms used in addition.[4]

- **Return to fertility**

There is no delay in return to fertility after removal of an SDI.

- **Side effects of SDIs**

Women should be informed about the likely bleeding patterns that may occur with the progestogen only implant. Less than a quarter of women using the progestogen only implant will have regular bleeds. Infrequent bleeding is the most common pattern (approximately one third). Around one fifth of women experience no bleeding and approximately one quarter have prolonged or frequent bleeding. Altered bleeding patterns are likely to remain irregular.

Women should be advised that there is no evidence of a causal association between use of an SDI and headache, weight change, mood change or loss of libido. Women who develop new symptoms of migraine with aura whilst using an SDI should be advised to seek medical review (UKMEC 3).

Women can be informed that acne may improve, occur or worsen during the use of an SDI.

- **Discontinuation**

Clinicians should be aware that early discontinuation is common (up to 43% within 3 years of use).

- **Health concerns**

Women should be informed that evidence suggests there is little or no increase in the risk of venous thromboembolism and no statistically significant risk of a myocardial infarction or stroke associated with use of an SDI.[1]

Women should be informed that there is no evidence of a clinically significant effect on bone mineral density with use of an SDI.

There are insufficient data to make an evidence based recommendation concerning the effect of SDIs on breast cancer risk. In keeping with other progestogen only methods, any attributable risk is likely to be very small.

- **Drug interactions**

Women using liver enzyme inducing drugs short term (< 3 weeks) may choose to continue with an SDI and additional contraceptive measures such as condoms should be used throughout treatment and until 4 weeks after stopping the medication. Alternative methods should be used if liver enzyme inducing drugs are to be used long term.

The efficacy of SDIs is not reduced by non-liver enzyme-inducing antibiotics and additional contraceptive precautions are not required.

- **Non contraceptive benefits**

In common with other methods that suppress ovulation, SDIs may improve dysmenorrhoea and the symptoms of endometriosis. Up to 20% of women using a progestogen only implant will be amenorrhoeic, which some may perceive as a benefit.

- **Timing of insertion**

Ideally, an implant should be inserted between Days 1 and 5 of a normal menstrual cycle. An implant can be inserted at any other time in the menstrual cycle if the clinician is reasonably certain that the woman is not pregnant and that there is no risk of conception in the preceding 3 weeks, with a negative pregnancy test. Additional barrier methods or abstinence should be advised for 7 days after insertion.

Postpartum an SDI can be inserted up to Day 21 with immediate contraceptive cover and is safe for women and infants who are breastfeeding. If inserted after Day 21, then condoms or abstinence should be advised for 7 days preceding insertion. Insertion can be prior to Day 21 but bleeding may be a problem (unlicensed use). [4,5]

An SDI can be inserted on the day of surgical abortion. It can also be inserted on the day of taking oral mifepristone for medical abortion or following the second stage of a medical abortion and an SDI can also be inserted immediately following a miscarriage.[6] No additional method is required. If started > 5 days after the procedure, additional precautions are required for 7 days.

"Reasonable certainty" that the woman is not pregnant means one of the following: no intercourse since last menstrual period, a reliable method of contraception has been used correctly and consistently since last menstrual period, within 7 days of last normal menses, within 7 days post abortion or miscarriage, fully or nearly fully breastfeeding and amenorrhoeic and less than 6 months postpartum.[1]

- **Provision of information**

Women should be signposted to the website contraceptionchoices.org and or to the patient information leaflet "Your Guide to Post-Natal contraception" on the hospital intranet.

- **Documentation**

Completion of the first side of the Implant Insertion proforma should be undertaken at the assessment visit for all women wishing to have an SDI fitted. Arrangements for interim contraception and timing of fitting should be clearly documented in the appropriate spaces.

5. SDI insertion

- Practitioners who insert and remove SDIs should be appropriately trained, maintain competence and attend regular updates in dealing with emergencies.
- Aseptic technique and appropriate anaesthesia should be used for insertion and removal of SDIs.
- The insertion procedure should be documented on the second side of the Implant Insertion proforma and removals documented on the Implant Removal proforma (or the Implant Change proforma as appropriate).
- Women should be given information (oral and written) about the implant and expected duration of use.
- Women should be advised to return if they cannot feel their implant or it appears to have changed shape; they notice any change to the skin or pain around the site of the implant; they become pregnant; or they develop any condition which may contraindicate continuation of the method. For problems occurring in the longer term, they should be advised to contact iCaSH.
- If a woman chooses an SDI and is at higher risk of sexually transmitted infection (STI) (aged < 25 years or new sexual partner or more than one partner in the last year) she should be advised to use condoms in addition.
- Routine follow up is unnecessary but women should contact iCaSH to discuss problems or if they want to change their contraceptive method.

6. Women considering removal

Women not wishing to conceive should be advised that ~~that~~ removal should take place during the first few days of menses or that an alternative method should be started immediately as return to fertility is rapid. Women wishing to conceive can be given advice about folic acid and have the implant removed at any time.

Women requesting a removal of an SDI do not need to abstain or use additional methods of contraception if the SDI is removed within its licensed duration. [1]

7. Managing problems associated with intrauterine contraception

- **Problematic bleeding**

Women who experience problematic bleeding while using a progestogen-only implant should have a sexual history taken to establish STI risk and/or be investigated for gynaecological pathology if clinically indicated.

For those experiencing problematic bleeding and who have had gynaecological pathology excluded, the combined oral contraceptive pill may be offered or mefanamic acid for treatment. Data relating to the efficacy of these treatments is limited but does provide some evidence of beneficial effect on bleeding patterns.

- **Pregnancy**

There is no evidence of a teratogenic effect of SDIs, but if a user becomes pregnant and continues with the pregnancy then the implant should be removed.

- **Complications with removal**

If difficulty arises with SDI removal due to deep insertion, failed insertion or migration it should be localised with ultrasound before being removed. Referral to an expert implant removal centre (iCaSH) is recommended.

8. Cost effectiveness:

- Increasing the uptake of LARCs such as the progestogen-only implant will reduce unintended pregnancies. Use of the progestogen-only implant is cost effective at 1 year of use. [7]
- The implant is more cost effective than combined oral contraception or progestogen-only injectables. [7]

References

1. Faculty of Sexual and Reproductive Health (FSRH) Clinical Effectiveness unit (CEU). Progestogen-only Implants: Feb 2014; www.fsrh.org.uk.
2. Faculty of Sexual and Reproductive Health (FSRH) Clinical Effectiveness unit (CEU). CEU Statement (September 2010) Nexplanon. Updated November 2010
3. Faculty of Sexual and Reproductive Health (FSRH) Clinical Effectiveness unit (CEU).UK Medical Eligibility Criteria for Contraceptive Use. (April 2016) www.fsrh.org.uk.
4. Advice for women seeking contraception and sexual and reproductive healthcare during the Covid 19 pandemic. www.fsrh.org accessed 5/5/20.
5. https://www.fsrh.org/standards-and-guidance/documents/contraception-after-pregnancy-guideline-january-2017/
6. https://www.nice.org.uk/guidance/ng140/chapter/Recommendations#improving-access-to-contraception
7. National Institute for Health and Care Excellence (NICE). Long-acting Reversible Contraception: The Effective and Appropriate Use of Long-acting Reversible Contraception. 2005. http://guidance.nice.org.uk/CG30 [Accessed 212.October 2013].