IMPLANON NXT®- ETONOGESTREL IMPLANT

Keywords: Etonogestrel Implant, Implanon, Implanon NXT, contraception, progestogen, progesterone, hormone implant, long acting reversible contraceptive, LARC

Note: See specific guidelines for Insertion and Removal (Non-routine) of ImplanonNXT®

KEY POINTS

1. ImplanonNXT® is a progestogen only implant that is a highly effective, long acting reversible contraceptive.[1]
2. Medical practitioners must attend a training course before inserting ImplanonNXT®[1]
3. Pregnancy should be excluded prior to insertion. Careful history taking and awareness of the limitations of pregnancy testing can reduce the risk of missing an implantation bleed or ectopic pregnancy.[1]
4. A single ImplanonNXT® rod provides effective contraception for 3 years.[1]
5. Women with a BMI > 30 kg/m^2 can use a progestogen-only implant without restriction[2], and while product information suggests heavier women may be at increased risk of failure in the third year of use, evidence does not support this view, and therefore a recommendation for earlier replacement is not required.[1] No increased pregnancy risk in women <149kg has been shown, however the risk of reduced efficacy cannot be excluded.[2]
6. Women should be advised an ImplanonNXT® implant results in changes of menstrual patterns for all users, ranging from amenorrhoea to frequent and/or prolonged bleeding.[1] Around 20% of users will experience amenorrhoea,[1] while almost 50% of users will have infrequent, frequent, or prolonged bleeding. For many women, bleeding patterns in the first 3 months of use are generally predictive of future bleeding.[2]
7. Women should be informed there is no delay in return of (pre-existing) fertility following removal of the ENG implant.[3]
8. The ENG implant can be safely used in women who are breastfeeding.[3]

BACKGROUND

Implanon NXT® is a single-rod progestogen-only implant containing Etonogestrel (ENG) which is placed subdermally in the inner upper non-dominant arm.[3] It is an effective contraception for up to 3 years and prevents pregnancy by inhibiting ovulation, causing thickening of the cervical mucus to prevent sperm penetration,[1] and altering the endometrium.[3] ImplanonNXT® contains 68 mg of ENG[1, 3] and is licensed for 3 years of use.[2]

ImplanonNXT® provides an alternative form of contraception for women with medical conditions where oestrogen-containing contraception is contra-indicated, or when an oestrogen side-effect such as nausea or breast tenderness becomes problematic.[1] Women with inflammatory bowel disease or other enteral malabsorption conditions may find this non-oral form of contraception a suitable option.[1]

Irregular vaginal bleeding is the most common single reason women give for early discontinuation of the implant, so pre-insertion counselling is essential.[1] This may have implications for women with religious or cultural restrictions during menstrual bleeding.[4]

EFFICACY

- Perfect & typical use results in >99.9% efficacy.[1]

CONTRAINDICATIONS

ABSOLUTE CONTRA-INDICATION

- Breast cancer active within the last 5 years[1]

STRONG RELATIVE CONTRA-INDICATIONS

- Current venous thromboembolism (VTE) being treated with anticoagulants[1]
- Past history of breast cancer with no evidence of disease for ≥5 years[1]
- Development for the first time during use – ischaemic heart disease, stroke or transient ischaemic attack[1]
- Unexplained vaginal bleeding (suspicious or serious underlying condition)[1]
- Severe decompensated cirrhosis[1]
- Liver tumours – hepatocellular adenoma and malignant tumours[1]
- Systemic lupus erythematosus (SLE) with positive (or unknown) antiphospholipid antibodies[1]
- Concurrent use with long term liver enzyme-inducing drugs[1]
  Note: If commenced on a short course of liver enzyme inducing medications, advise to use condoms until 28 days after medication ceased.[1]

SIDE-EFFECTS

Possible side effects associated with ImplanonNXT® include:

- bleeding irregularities – may be irregular and unpredictable The menstrual pattern may vary from amenorrhoea to frequent and/or prolonged bleeding[1, 2]
- local reaction to the insertion site, scarring[1, 2]
- weight gain[1]; emotional lability[1]; breast tenderness[1]; acne[1, 2]
- deep insertion may lead to difficult removal later

INITIATION OF IMPLANON NXT® [1]

SITUATION	STARTING IMPLANT	EFFECT
No contraception or barriers	Day 1 (first day of bleeding) to day 5 of a normal menstrual cycle. Any other time if pregnancy is excluded	Immediately 7 days
Combined pill or vaginal ring	Anytime if pills/ ring correctly used / taken, otherwise exclude pregnancy	Immediately
DMPA injection	Any time if within 14 weeks of injection	Immediately
Progestogen only pills (POP)	Any time if pills have been taken correctly; otherwise exclude pregnancy	7 days or continue progestogen pill for an additional 7 days
Abortion (surgical, or medical after 2nd stg) & miscarriage	Up to & including day 5 post procedure. >Day 5-consider risk of repeat pregnancy	Immediately 7 days
Copper intrauterine device (IUD)	Day 1 (first day of bleeding) to day 5 of a normal menstrual cycle. Other times	Immediately 7 days, or leave IUD in place for 7 additional days
Levonorgestrel IUD	Anytime is before expiry of the device	7 days, or leave IUD in place for 7 additional days
Implant- ENG	If before the expiry time of the implant If implant expired, exclude pregnancy	Immediately 7 days
Post-partum (includes breastfeeding*, stillbirth & termination >24weeks)	Less than 21 days postpartum – any time from delivery.[1, 5] More than 21 days post-partum and no menses – any time if pregnancy excluded Menstrual cycles resumed – as above for no contraception or barriers	Immediately 7 days See 'No contraception / barriers' above

*If not breastfeeding, advise to commence contraception by/at 21 days postpartum to avoid pregnancy.[1] The earliest ovulation date is considered to be 28 days after birth, with sperm survival up to 7 days.[1] Therefore fertility contraception is not required before 21 days postpartum.[1, 3] If progestogen only contraceptives are used <3 weeks postpartum, heavy irregular bleeding may occur.[3]

MEDICAL HISTORY AND EXAMINATION PRIOR TO INSERTION

Medical History

The medical history should include:

- age- from commencement of menarche (unknown effects prior to menarche)[1]
- breast cancer[1]
- obstetric / sexual / menstrual history-
  - last menstrual period (time, heaviness, usual pain/premenstrual symptoms and duration of menses) to exclude implantation bleeds or ectopic pregnancy;
  - history of unprotected sexual intercourse (UPSI) (a negative pregnancy test does not exclude recent conception if UPSI in past 3 weeks).[1]
  - pregnancy history- suitable immediately after birth, miscarriage, stillbirth[1]
  - lactation – implants are considered safe in lactating women[1]
- cardiovascular risk factors[1]
- thromboembolic disease[1]
- keloid scarring - insertion / removal may cause excessive scarring[1]
- liver disease – ENG is metabolised in the liver[1]
- medications – ENG implants may be less effective with liver enzyme-inducing medications (e.g. rifampicin; some anti-epileptics [phenytoin, carbamazepine, barbituates, primidone, topiramate, oxcarbazepine & some anti-retrovirals] & St John's Wort) as they induce the liver to metabolise ENG faster.[1]

Examination

1. Perform a blood pressure measurement.[1]
2. Assess the woman's weight and height to calculate the BMI- see key point 5.
3. Assess for sexually transmitted infection (STI) & cervical screening as required.

COUNSELLING PRIOR TO INSERTION [1]

Prior to insertion, women should be counselled about:

- changes in menstrual patterns (unacceptable bleeding is the most common reason for implant removal)

- complications and side-effects (e.g. acne, local reaction/scarring, and some reports of headaches, loss of libido, mood changes, weight gain, breast tenderness)
- follow-up with the medical practitioner
- ImplanonNXT® information e.g. mechanism of action, duration of use, efficacy, advantages/disadvantages, insertion and removal details, lack of sexually transmitted infection (STI) protection, and return of fertility after removal.
- Provide written information (available from Sexual & Reproductive Health WA (formerly Family Planning of Western Australia) at http://www.srhwa.com.au/

FOLLOW-UP

No routine follow-up is required.[2] The woman can self-initiate review, as required, if there are no other indications (e.g. pregnancy test or impalpable implant) for early review.[1]

Advise the woman to return for review if[2]:

- she wants to discuss any problems or change contraception
- the implant is not palpable or has changed shape
- skin changes or pain around the site
- she becomes pregnant or
- she develops any condition that contraindicates continuing with the implant.[2]

On review:

- palpate the implant[1]
- assess for side-effects[1]
- check for new medical conditions or medications[1]
- assess bleeding patterns[1]
- assess for STI risks

INSERTION OF IMPLANON NXT®

See Clinical Guideline, Obstetrics & Gynaecology: Contraception: Implanon® - Insertion

NON-ROUTINE REMOVAL OF AN IMPLANON NXT® IMPLANT

See Clinical Guideline, O&G, Contraception: ImplanonNXT®- Removal (Non-Routine)

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REFERENCES / STANDARDS

1. Family Planning NSW, Family Planning QLD, Family Planning VIC. Contraception: An Australian clinical practice handbook. 3rd ed. Canberra: **Sexual Health & Family Planning Australia**; 2012.
2. Faculty of Sexual & Reproductive Healthcare. Progestogen-only implants. England: **FSRH / RCOG** 2014. Available from: http://www.fsrh.org/pdfs/CEUGuidanceProgestogenOnlyImplants.pdf.
3. Buckley N, editor. Australian medicines handbook. 16th ed. Adelaide, SA: **AMH**; 2015.
4. Fisher MA. Implanon: A New Contraception Implant. **AWHONN**. 2008;37(3):361-8.
5. World Health Organization. Medical eligibility criteria wheel for contraceptive use. . **WHO**. 2015. Available from: http://apps.who.int/iris/bitstream/10665/173585/1/9789241549257_eng.pdf?ua=1

National Standards – 1- Care Provided by the Clinical Workforce is Guided by Current Best Practice
4- Medication Safety

Legislation -

Related Policies - KEMH Clinical Guidelines, Obstetrics & Gynaecology: Contraception:

- ImplanonNXT® - Insertion
- ImplanonNXT® - Removal (Non-Routine)

Other related documents –

- SRHWA (Information sheets): Contraception Choices; Contraceptive Implant
- SRHWA (Health Professionals): Contraception Essentials (2013)
- WHO (2015) Medical Eligibility Criteria Wheel for Contraceptive Use

RESPONSIBILITY	
Policy Sponsor	**Nursing & Midwifery Director OGCCU**
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