IMPLANON NXT®- ETONOGESTREL IMPLANT

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

Key points

Background
Efficacy
Contra-indications
Side-effects

Initiation of Implanon NXT®
Prior to insertion: Medical history and examination; Counselling
Follow-up

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

KEY POINTS

1. Implanon NXT® 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 Implanon NXT®.
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 Implanon NXT® rod provides effective contraception for 3 years.1
5. Women with a BMI > 30 kg/m² can use a progestogen-only implant without restriction2, 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 Implanon NXT® 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. 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, and altering the endometrium. Implanon NXT® contains 68 mg of ENG and is licensed for 3 years of use.

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

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

Efficacy

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

Contraindications

Absolute Contraindication

- Breast cancer active within the last 5 years

Strong Relative Contraindications

- Current venous thromboembolism (VTE) being treated with anticoagulants
- Past history of breast cancer with no evidence of disease for ≥5 years
- Development for the first time during use – ischaemic heart disease, stroke or transient ischaemic attack
- Unexplained vaginal bleeding (suspicious or serious underlying condition)
- Severe decompensated cirrhosis
- Liver tumours – hepatocellular adenoma and malignant tumours
- Systemic lupus erythematosus (SLE) with positive (or unknown) antiphospholipid antibodies
- Concurrent use with long term liver enzyme-inducing drugs

Note: If commenced on a short course of liver enzyme inducing medications, advise to use condoms until 28 days after medication ceased.
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®

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

\(^1\): studies by\(^2\): practice.
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.

**FOLLOW-UP**

No routine follow-up is required. The woman can self-initiate review, as required, if there are no other indications (e.g. pregnancy test or impalpable implant) for early review. Advise the woman to return for review if:

- 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.

On review:

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

**INSERTION OF IMPLANON NXT®**

See Clinical Guideline, Obstetrics & Gynaecology: Contraception: [Implanon® - Insertion](http://www.srhwa.com.au/)

**NON-ROUTINE REMOVAL OF AN IMPLANON NXT® IMPLANT**

REFERENCES / STANDARDS


National Standards – 1- Care Provided by the Clinical Workforce is Guided by Current Best Practice
1. 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
Initial Endorsement | March 2009
Last Reviewed | December 2015
Last Amended | December 2018
Review date | December 2018

Do not keep printed versions of guidelines as currency of information cannot be guaranteed.
Access the current version from the WNHS website.