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 ImplanonNXT®

  Prior to insertion: Medical history and examination; Counselling

Follow-up

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®.²

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/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 <149 kg 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. 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. ImplanonNXT® contains 68 mg of ENG and is licensed for 3 years of use.

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. 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 CONTRA-INDICATION

- Breast cancer active within the last 5 years

STRONG RELATIVE CONTRA-INDICATIONS

- 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 amenorrhea 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\(^1\)

<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. Any other time if pregnancy is excluded</td>
<td>Immediately 7 days</td>
</tr>
<tr>
<td>Combined pill or vaginal ring</td>
<td>Anytime if pills/ ring correctly used / taken, otherwise exclude pregnancy</td>
<td>Immediately</td>
</tr>
<tr>
<td>DMPA injection</td>
<td>Any time if within 14 weeks of injection</td>
<td>Immediately</td>
</tr>
<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>
</tr>
<tr>
<td>Abortion (surgical, or medical after 2(^{rd}) stg) &amp; miscarriage</td>
<td>Up to &amp; including day 5 post procedure. &gt;Day 5-consider risk of repeat pregnancy</td>
<td>Immediately 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. Other times</td>
<td>Immediately 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 If implant expired, exclude pregnancy</td>
<td>Immediately 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) More than 21 days post-partum and no menses – any time if pregnancy excluded Menstrual cycles resumed – as above for no contraception or barriers</td>
<td>Immediately 7 days See ‘No contraception / barriers’ above</td>
</tr>
</tbody>
</table>
*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**

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.srhwaw.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)
REFERENCES / STANDARDS

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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