



CLINICAL PRACTICE GUIDELINE

Implanon NXT®: Removal (Non Routine)

This document should be read in conjunction with the [Disclaimer](#)

Aim

To inform staff about methods for identifying and removing an Implanon that is non palpable in a woman who is referred to gynaecology clinic at KEMH.

Background Information

A non-palpable Implanon® or Implanon NXT® implant can result from incorrect insertion, migration,¹ non-insertion or because the woman has had significant weight gain^{2, 3}. Significant migration of implants does not occur if correctly inserted, but frequently the device can be found approximately 2 cm away from the insertion site⁴. Other reasons associated with difficult implant removal include the attempted removal by an inexperienced practitioner, scarring from previous unsuccessful attempts at removal, or due to a fibrous capsule around the implant³.

Attempting to remove an implant which is impalpable can cause scarring, nerve and blood vessel damage.^{1, 5} The original Implanon® was not radio-opaque and could be visualised by ultrasound or magnetic resonance imaging (MRI)². However the new version (ImplanonNXT®) was released in mid-2011 and contains barium sulphate making the implant visible on X-ray and computerised tomography (CT) scan.^{1, 6} ImplanonNXT® is available from the KEMH pharmacy and the old version is no longer available in Australia.⁷

A simple Xray of the site can confirm the presence of ImplanonNXT®.¹ However, the older version will still be present in some women and is thus not visible on x-ray. Localisation by ultrasound of the non-palpable Implanon® or ImplanonNXT® implant can be done by an experienced sonographer.¹ It is cheaper than MRI examination and can give the location and depth of the implant which allows marking of the site to direct identification⁸. Removal without direct ultrasound guidance should not be attempted if the implant is not palpable.

Key Points

1. An alternative form of contraception is recommended if an Implanon® or ImplanonNXT® implant is unable to be found or is non-palpable.^{1, 5, 9}

2. Any queries or concerns regarding Implanon[®] or ImplanonNXT[®] implants or information on training should be directed to the manufacturer: Merck, Sharp & Dohme, 1800 818 553.⁵
3. Two specialist Implanon removal centres recommended by The Royal Australian and New Zealand College of Obstetricians and Gynaecologists for Western Australia for deep or difficult to remove implants, are KEMH and Family Planning WA (now known as [Sexual & Reproductive Health WA](#)- Roe St, Northbridge).¹⁰ However, impalpable implants should be referred to KEMH where they can be removed under ultrasound assistance.

Management

1. A woman referred to KEMH for non-routine removal of an Implanon implant is booked to the gynaecology clinic. Doctor Tamara Walters provides expertise in this clinical situation. The clinic appointment is classified as category 2 priority and if possible an appointment for review is made for the woman to be seen within 6 – 8 weeks.
2. A history should be taken to ensure the Implanon implant was in fact inserted and not left in the introducer e.g. did the woman feel the implant in her arm after insertion? Note her subsequent bleeding patterns². A substantial number of impalpable-implants were never actually inserted or fell out of the introducer before attempted insertion. The introducer of the Implanon NXT is designed so that the implant cannot fall out of the needle.
3. A non-palpable implant should be located prior to removal.¹ If palpation of the Implanon implant at the clinic appointment is not successful an ultrasound may be arranged for definitive localisation. MRI, X-ray, and CT scan provide further tools for implant localisation.¹
4. If the implant is found on ultrasound or by an alternative method and is subsequently palpable, removal may be appropriate under local anaesthetic in the clinic, or in the Day Surgery Unit (DSU). If general anaesthetic is required the woman is booked to the DSU for the procedure.
5. If the Implanon is not palpable it should be removed under direct ultrasound guidance.⁵ Relying on skin markings is not sufficient as the position relative to the skin changes with small positional changes of the arm and an attempt to remove it should not be made.
6. If Implanon implants not containing barium, cannot be visualised by ultrasound or MRI and there is a reason to believe it is still present in the body, the manufacturer should be contacted for the appropriate procedure for testing of serum etonogestrel levels.^{1, 8}
 - For Implanon implants the manufacturer: Merck, Sharp and Dohme, can be contacted on Tel. 1800 818 553.

- They will provide instructions of how to collect and send serum for processing in Germany. If serum levels indicate the presence of the implant, further ultrasound and MRI examination is to be arranged.

References

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Related policies and resources

OD 0429/13: [National Hand Hygiene Initiative in Western Australian Healthcare Facilities](#)
 OD 0324/11: [Consent to Treatment Policy for the Western Australian Health System](#) (2011)
[ImplanonNXT® Product Information](#) (2015)
 SRHWA: [Contraceptive Implant](#); [Contraception choices](#)

Related WNHS policies, procedures and guidelines

- [Consent to Treatment/ Surgery/ Intervention Policy \(2014\)](#)

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