CONTRACEPTION

IMPLANON NXT – ETONOGESTREL IMPLANT

Date Issued: January 2009
Date Revised: May 2013
Review Date: May 2015
Authorised by: OGCCU
Review Team: OGCCU

IMPLANON NXT® – REMOVAL (NON-Routine)

Keywords: Implanon, hormone implant, Implanon removal, etonogestrel, contraception, non-palpable, direct ultrasound guidance

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, non-insertion or because the woman has had significant weight gain[^1,2]. Significant migration of implants does not occur if correctly inserted, but frequently the device can be found approximately 2 cm away from the insertion site than at initial insertion[^3]. 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 implant[^2].

Attempting to remove an implant which is impalpable can cause scarring, nerve and blood vessel damage. The original implant was not radio-opaque and could be visualised by ultrasound or magnetic resonance imaging (MRI)[^1]. However the new version (Implanon NXT®) was released in mid 2011 and contains barium sulphate making the implant visible on X-ray and computerised tomography (CT) scan[^4]. Implanon NXT is available from the KEMH pharmacy and the old version is no longer available in Australia.

A simple X-ray of the site can confirm the presence of Implanon NXT. 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 Implanon NXT implant can be done by an experienced sonographer. It is cheaper than MRI examination and can give the location and depth of the implant which allows marking of the site to direct removal[^5].

KEY POINTS

1. An alternative form of contraception is recommended if an Implanon® or Implanon NXT implant is unable to be found or is non-palpable.
2. Any queries or concerns regarding Implanon® or Implanon NXT implants should be directed to the manufacturer Merck, Sharp and Dohme, 1800 818 553[^6].
3. The two Specialist Implanon® Removal Centres recommended by The Royal Australian and New Zealand College of Obstetricians and Gynaecologists for Western Australia are KEMH and Family Planning WA (Roe street, Perth). However, impalpable implants should be referred to KEMH where they can be removed under ultrasound assistance[^6].

MANAGEMENT

1. A woman referred to KEMH for non-routine removal of an Implanon® implant is booked to the gynaecology clinic. Dr. Tamara Walters provides expertise in this clinical situation. The clinic
appointment is classified as category 1 priority and an appointment for review is made for the woman to be seen within 30 days.

2. A full medical 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 patterns\(^1\). A substantial number of impalpable implants were never actually inserted.

3. 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.

4. If the implant is found on ultrasound or by an alternative method 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. Relying on skin markings is not sufficient as the position relative to the skin changes with small positional changes of the arm.

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 manufacturers should be contacted to arrange for testing of serum Etonogestrel levels\(^5\).
   - For Implanon NXT 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 indicates the presence of the implant, further ultrasound and MRI examination is to be arranged.

**REFERENCE**