

Appendix 3: Suggested standard Nexplanon removal procedure (palpable implants with 'pop-up' sign only)

NOTE THAT THIS IS BASED ON THE OPINION AND EXPERIENCE OF THE GUIDELINE DEVELOPMENT GROUP AND IS INTENDED AS A GUIDE ONLY.

- ▶ **NEXPLANON SHOULD ONLY BE REMOVED BY A HEALTHCARE PRACTITIONER WHO HAS UNDERTAKEN APPROPRIATE TRAINING IN THE PROCEDURE AND MAINTAINED UP-TO-DATE SKILLS.**

- ▶ **Resuscitation equipment**
 - ▶ Ensure that resuscitation equipment is available as required by local protocol. There is a small risk of collapse due to vasovagal reaction or anaphylaxis.²¹⁸

▶ **Identify the implant by palpation**

- ▶ Palpate the full length of the implant if possible.
- ▶ Ensure that the distal end pops up to the skin surface when gentle pressure is applied at the proximal end.
- ▶ If the implant is impalpable, difficult to feel or likely to be difficult to remove, do not attempt removal and refer to a specialist service.

▶ **Positioning the patient**

- ▶ Lie the patient flat on their back.
- ▶ Place the arm in the appropriate position. This will vary according to implant site. For removals at the new recommended site:
 - ▶ Abduct the arm to 90°
 - ▶ Bend the arm at the elbow
 - ▶ Put the patient's hand under their head.

An alternative position may be used if this enables better access to the removal site.

▶ **Anaesthetise the removal site**

Lidocaine 1% may be used with or without adrenaline 1:200 000 (adrenaline may reduce bleeding). Aspirate prior to injection to avoid accidental intravenous administration.

- ▶ Identify the distal end of the implant and push up to the skin surface by gently pressing on the proximal end.
- ▶ Clean the skin at the removal site using chlorhexidine and alcohol or similar, according to local policy.²¹⁹ The GDG is unable to comment as to whether wipes or solution should be used.
- ▶ Inject a maximum total of 0.5–1 ml lidocaine 1% into the skin overlying the distal end of the implant (some clinicians inject some of this subdermally just under the distal tip).

▶ **Removal equipment**

- ▶ Lay sterile removal equipment on a sterile field.
- ▶ Put on sterile gloves.
- ▶ **From this point onwards, aseptic technique is required.**

▶ **Removal procedure**

Note that the removal attempt should be stopped if there is any indication of nerve pain.

- ▶ Clean the area around the removal site again with chlorhexidine and alcohol or similar, according to local policy.²¹⁹ The GDG is unable to comment as to whether wipes or solution should be used.
- ▶ Ensure adequate visualisation.
- ▶ Pop up distal end of implant to skin surface using gentle pressure at the proximal end.
- ▶ Using a scalpel make a **small** (2 mm) longitudinal incision directly over the distal tip of the implant, at the site where the local anaesthetic was injected.
- ▶ Push the implant gently from the proximal end using the index finger of the non-removing hand to direct the distal end towards the incision site ('pop-out' technique). Push until the tip is visible at the incision.
- ▶ If the implant is encapsulated, make a small, gentle cut across the tissue sheath over the end of the visible implant so that the implant can be pushed out of the sheath.
- ▶ Grasp the implant with gloved fingers and remove.
- ▶ If the implant cannot be grasped, forceps can be used to gently grasp the implant. Only use forceps if the implant is visible at the incision site.

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- ▶ **Ensure that the complete implant has been removed (4 cm).** Consider measuring the removed implant to confirm.

- ▶ **Post-removal**
 - ▶ Apply pressure until haemostasis is achieved.
 - ▶ Apply paper sutures to oppose skin edges.
 - ▶ Apply sterile pressure dressing for 48 hours (some clinicians also apply a sterile adhesive dressing under the pressure dressing).
 - ▶ Advise the patient about infection, bruising and wound care.