Procedures for the insertion and removal of implants

In her letter in this Journal issue, Dr Shefras raises important issues regarding safety and the standardisation of acceptable procedures for insertion and removal of implants.¹
Complications during insertion and removal of implants have been described previously.\(^2\)

An appreciation of the anatomy of the medial aspect of the upper arm is needed to avoid damage to the many structures in this region and aid the correct deployment of the device. This is essential if subsequent removal is to be easy and trouble-free. It is recommended that Nexplanon\(^\circledast\) be inserted well above the medial epicondyle of the non-dominant arm and in its postero-medial aspect. This avoids the major neurovascular structures in the upper arm.

Insertion of Nexplanon should be into the subcutaneous plane, while removal should be in its entirety. In both instances it is vital to avoid damage to adjacent structures.

Several methods of removal of implants have been described. Perhaps the easiest is that described by Praptohardjo and Wybowo\(^3\) in their “U” technique for removal of Norplant\(^\circledast\).

Whichever method is used it is first important to secure the implant so that there is minimal tissue sandwiched between the implant and the skin. In a satisfactorily deployed, and therefore superficial, implant it is possible to achieve this by pushing down on it as stated previously.\(^4\) One may also steady the implant using a vasectomy forceps in the manner of the “U” technique, where the implant is held within the lumen of the locked vasectomy forceps. One may grasp the implant either through the skin or through a small incision. In either scenario it still remains important to ensure that only the implant is encircled.

The overlying skin or tissue may now be incised on the tented lower end of the implant. In a deep-seated implant, following localisation by ultrasound, one may again grasp the implant with a vasectomy forceps. An Allis forceps, with its teeth, is best avoided.

If one uses a mosquito forceps\(^5\) it is recommended that one chooses a curved instrument with its tip always directed under the skin rather than pointing deeper.

Undoubtedly, in this context, the safety of Nexplanon is primarily contingent on the correct insertion of the implant. Subsequent removal then becomes a matter of ease.

**Competing interests** None.

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**REFERENCES**