Current issues around contraceptive implants: New site, evidence

Dr Suzanne Pearson, Senior Medical Educator





Recommended site for Implanon NXT

Product information

- 2011: inner side of non-dominant upper arm about 8-10 cm above medial epicondyle of the humerus
- 2016 : AVOIDING the sulcus between the biceps and triceps
- anterior or posterior?





Recommended site for Implanon NXT

- June 2016 UK FSRH CEU Statement supports the change and recommends insertion over the biceps muscle anterolateral to the sulcus to avoid damage to the ulnar nerve which runs posteromedial to the sulcus
- November 2016 FPAA medical advisory committee letter to MSD
- February 2017 Implant Insertion Site Scientific Input Enagement meeting: clinical and anatomical meeting, with consensus that available evidence supported insertion over triceps with further anatomical research required to explore if more specific advice can be provided.



Published research

- 40 female cadaver arms dissected with neurovascular structures within each window identified
- 8-10cm proximal to the medial epicondyle and 3-5cm posterior to the sulcus is theoretically safer than other areas of the arm, as no major neurovascular structures located in this window
- Elbow flexion with the hand underneath the head displaced the ulnar nerve anteriorly towards the sulcus

Contraception 2019

Neurovascular anatomy of the adult female medial arm in relationship to potential sites for insertion of the etonogestrel contraceptive implant

J Iwanga^a, M Fox^b, H Rekers^b, L Schwartz^b, R. S. Tubbs^a

^aSeattle Science Foundation

^bMerck & Co. Inc. https://doi.org/10.1016/j.contraception.2019.02.007



USA FDA approved label revised Oct 2018

Recommended positioning of the arm during insertion and removal:

The arm should be flexed at the elbow with the hand underneath the head (or as close as possible)

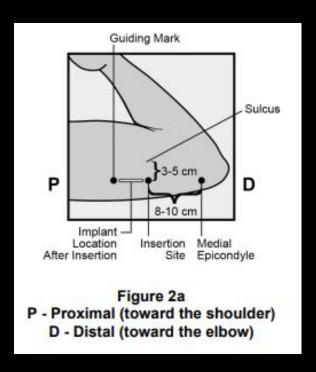


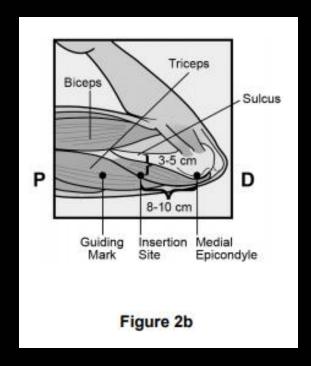
Image 1 from Nexplanon PI, available https://www.merck.com/product/usa/pi_circulars/n/nexplanon/nexplanon_pi.pdf





3-5cm posterior to the sulcus at 8-10cm proximal to the medial epicondyle





If it is not possible to insert the implant 3-5cm from the sulcus (eg. thin arms) it should be inserted as far from the sulcus as practical



Removals and reinsertions

- Arm position same as for insertion
- New implant may be inserted in the same arm, and through the same incision as long as the site is in the correct location.





Likely changes to Australian practice

 TGA PI update expected to be approved first quarter 2020

MSD communication

 Update education and training: increased emphasis on surface anatomy and positioning of patient





