Do UK Faculty registered trainers teach the insertion and removal of subdermal contraceptive implants in a similar fashion?

The manufacturers of Nexplanon®, the subdermal contraceptive implant (SDI), recommend a technique for insertion and removal. This is endorsed by the UK Faculty of Sexual & Reproductive Healthcare (FSRH; the Faculty) who provide Letters of Competence following completion of an e-learning programme (e-SRH), practice on a dummy ‘arm’ and practical training by a Faculty registered trainer (FRT). Insert superscript reference number 2 here. Unfortunately, the trainee may have more than one trainer, who may utilise varying techniques, which may be confusing to the learner. I decided to ask FRTs how they insert and remove SDIs when teaching in order to assess the magnitude of any differences.

In May 2012, the FSRH e-mailed on my behalf a questionnaire to 980 FRTs on the Faculty’s database. I asked questions about implant insertion and removal, asked for a free text description of removal and whether this had changed over time, and views on e-SRH. I defined a large difference if 75% or fewer respondents perform a manoeuvre differently from the recommended technique.

Some 980 questionnaires were sent out and 198 returned. Table 1 shows the responses obtained to the direct questions. There was considerable deviation from the manufacturer’s technique for insertion and removal. In removal, 123/198 (62.1%) participants do not mark the skin at the point of incision and show wide variation in the site of infiltration of local anaesthetic (LA). 76/198 (38.4%) participants push the implant distally prior to insertion of anaesthetic. 79/198 (39.9%) press the proximal end deeper to enable the distal end to stand proud of the surface. 42/198 (21.2%) utilise a combination technique. Concerning the site of skin incision, 80/198 (40.4%) site it below the distal tip of the device and 113/198 (57.1%) over the distal tip. 39/198 (19.7%) participants make a transverse incision, rather than longitudinal, some holding the blade face up, some down, pointing away from the operator or towards. Only 110/198 (55.6%) participants use forceps routinely.

In the free text analysis there was variation in 12 sub-categories of removal, often in important areas such as use of LA (site of infiltration, type), marking the skin and skin preparation, scalpel technique, use of forceps, delivery of the device, or removal of the fibrous capsule. 172/180 (95.6%) use the ‘pop-out’ technique, namely the delivery of the device into the incision by manipulating the proximal end of the device to visualise the distal tip. Eight inserted forceps into the wound to capture the device. Ninety-nine of these 172 said that they did not push the device distally prior to making the incision. Of these, 67 incised over the tip and 32 below. 73/172 push the
device distally: 39 incising over the tip and 34 below. [NB. There are different descriptions of the 'pop-out' technique. I have defined it as pushing the proximal end of the implant such that it is visible within the prior incision. I have made no judgement in this definition concerning the use of forceps.]

There was a wide range of techniques of pushing the implant distally prior to LA infiltration (some participants push the implant as far as it will move, others not as far) and subsequent manoeuvres. 129/197 (65.4%) had changed their removal technique since originally training, the commonest categories being direction and siting of the skin incision and use of forceps. 27/129 (21%) had ceased routinely using forceps for various reasons.

8/72 (11.1%) participants who remarked about e-SRH said that they had not accessed it at all or were currently unfamiliar with its content. There were mixed responses in those familiar with e-SRH. Some were enthusiastic and some adapted their teaching to the trainee’s use of e-learning. Others were less complimentary or were unhappy to adapt their teaching. There was a range of views on sitting to fit, marking the skin and siting the LA as explicated in the e-learning. There were issues with the insertion site (10 respondents believing that it was illustrated wrongly or involved risk to anatomical structures) and with the removal incision and usage of forceps.

I have found a wide range of techniques for the fitting and removal of Nexplanon, particularly in removal, and trainees have told me this is an area of concern. In spite of approved methods, many FRTs are deviating from them and the trainee may then undertake practical training with a trainer who has a completely personal technique. Surgical techniques will vary naturally to suit the ability, experience and dexterity of the practitioner; however, since trainees may have more than one trainer, an insistence on undertaking the procedure in one exclusive way potentially causes confusion and impedes learning. The techniques reported on the e-learning module follow those of the manufacturer: familiarity with the e-SRH would at least provide a starting point for the learner.

A weakness of the survey I carried out is lack of knowledge of the denominator of the sample. The Faculty sent the questionnaire to all instructing doctors on its database. Unfortunately, there is no way of removing details from the database of trainers who have ceased training or who have failed to update contact details. However, each region of the UK was represented. The Faculty has recently released guidance on the issue for consultation: this is to be commended. The e-SRH might illustrate different ways of working and the manufacturers might recognise that it is time to formulate a consensus view on development of the technique.

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REFERENCES