

LETTERS

Williams¹ has already eloquently answered the question as to whether LBC offers any real advantage over the conventional smear technique. We agree that LBC is a very welcome technological tool in the screening programme and would encourage ongoing endeavours to explore how LBC can bring further benefits to women's health.

Arabinda Saha, MD, FRCOG

Consultant in Obstetrics and Gynaecology, Diana, Princess of Wales Hospital, Scartho Road, Grimsby, North East Lincolnshire DN33 2BA, UK. E-mail: arabindasaha@msn.com

Kathryn Snee, MSc, FIBMS

PathLinks Cytology Manager, Lincoln County Hospital, Greetwell Road, Lincoln, Lincolnshire, LN2 5QY. E-mail: kathy.snee@ulh.nhs.uk

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Implanon® insertion

I was interested to read the articles in the July 2006 issue of the Journal regarding problems related to the Implanon® device.¹⁻⁴

I recently inserted an Implanon device into the left arm of a 23-year-old, right-handed patient. The procedure went smoothly. Eleven days after the insertion the patient presented with a 3-day history of a red rash around the site of the implant. On examination she had a lymphangitis-type reaction extending proximally and distally from the site of the implant. She was otherwise well with no systemic symptoms. The patient was commenced on oral flucloxacillin.

Three days later the patient was reviewed. The erythema had resolved. A sclerotic vessel was palpable extending from just deep to the implant to the mid-forearm. It was not tender. The patient experienced some discomfort on full extension of the arm but as she was otherwise well had opted to leave the implant *in situ*. A diagnosis of thrombophlebitis was made.

I can find no mention of this complication in the product or FFPRHC literature. I wonder if others have also seen similar cases?

Krishni Thurairajah, MRCGP, DFFP

General Practitioner, Airthrey Park Medical Centre, Hermitage Road, University of Stirling, Stirling FK9 4NJ, UK. E-mail: krishni.thurairajah@gp25559.forth-hb.scot.nhs.uk

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Full-term pregnancy with Implanon® in situ

I write in regard to the letter on full-term pregnancy with Implanon® *in situ* by Drs Cooling and Pauli that appeared in the July 2006 issue of the journal.¹

I had a similar experience when I fitted an Implanon in a patient who, in retrospect, was probably about 4 months pregnant. She gave a history of regular periods and was bleeding when I fitted it. She had not had unprotected sexual intercourse at all according to the history.

The patient then had amenorrhoea for several months and presented to her general practitioner with abdominal swelling and weight gain. She was obviously in advanced pregnancy (perhaps not the world's brightest!).

She was 36 weeks pregnant and the hospital contacted me to see if the Implanon should be removed. I could not see any reason for doing so at such a late stage. The patient delivered without problem and chose not to breastfeed. She at least now has effective contraception for a few years!

Beth Devonald, DFFP, MRCGP

Associate Specialist, Contraception and Sexual Health Service, Lincolnshire, UK. E-mail: devonald@btinternet.com

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- Cooling H, Pauli H. Full-term pregnancy with Implanon® *in situ* (Letter). *J Fam Plann Reprod Health Care* 2006; **32**: 204.

Full-term pregnancy with Implanon® in situ

I read with interest the letter in the July 2006 issue of the Journal regarding a successful full-term pregnancy with Implanon® *in situ*.¹ I too have a patient who presented in similar circumstances and is continuing her pregnancy with the Implanon *in situ* as she would wish to use this method of contraception following her confinement.

After discussion with the patient and colleagues, it seemed that to leave the Implanon in place was an option. Time will reveal the outcome in due course.

Elaine B Melrose, FRCOG

Consultant Obstetrician and Gynaecologist, Crosshouse Hospital, Kilmarnock KA2 0BE, UK. E-mail: elaine.melrose@aaht.scot.nhs.uk

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Full-term pregnancy with Implanon® in situ

The case of the full-term pregnancy with Implanon® *in situ* reported by Drs Cooling and Pauli in a recent issue of this Journal¹ raises several interesting issues.

First, *influence of pregnancy on Implanon*. As stated by the authors, the rate of release of the progestogen from the implant is likely to be unaltered in pregnancy. Also, the effects of the progestogen (both in terms of intended action and side effects) are likely to be overwhelmed by the massive increase in the placental production of progestogens.

Second, *influence of Implanon on pregnancy*. The authors correctly state that "progestogens in pregnancy have not been linked with fetal abnormality". This applies only to low-dose progestogen. High doses (>10 mg per day of norethisterone or equivalent) has been associated with masculinisation of the female fetus and hypospadias of the male fetus.² It is accepted that the dose of progestogen released by Implanon is low at 40 µg per day.³

Third, *timing of Implanon insertion*. The case in question is unique in that the Implanon was inserted after the critical period of organogenesis⁴

(i.e. 10-12 weeks' gestation) when the susceptibility to teratogenic insults starts to decline. This is also the period when the luteo-placental shift becomes complete,⁵ so that the placenta is now capable of detoxification. Thus, in the case described, the Implanon was effectively rendered inert, and its safety in this case cannot be extrapolated to exposure in early pregnancy. Pregnancy would continue to remain an absolute contraindication to Implanon insertion.

Fourth, *status quo*. The option of leaving the Implanon *in situ* has hardly any benefits apart from sparing the patient the minor inconvenience of removal and possible reinsertion, and negligible cost savings. Furthermore, the reason for the patient's satisfaction with Implanon needs to be explored. For example, the amenorrhoeic state may be incident on the pregnancy and not the Implanon. Hence, the patient's current experience with Implanon may not be predictive of her future response to the device.

Fifth, *primus non nocere*. It would seem biologically plausible that although low-dose progestogens have not proved to be teratogenic, zero exposure to exogenous progestogens would be the safest approach. Thus, the option of removing the Implanon would eliminate the potential for adverse effects.

Recommendation. The absence of a clear benefit coupled with a potential for harm would encourage me to advise the woman to have the Implanon removed. However, if after a full explanation of the implications she decides otherwise, I would accept her choice and support her through the pregnancy.

Postscript. A very dilute late afternoon urine sample could possibly explain the negative pregnancy test on the day of Implanon fitting. The initial pregnancy test could have been negative simply because it was too early: less than 3 weeks since unprotected sexual intercourse.⁶ The interval between the two pregnancy tests has not been mentioned. If it is assumed that this is the standard practice of two negative pregnancy tests 3 weeks apart before initiation of any method of contraception, the patient is likely to have become pregnant about 8 weeks prior to Implanon fit.

Parivakkam S Arunakumari, MD, MRCOG

Specialist Registrar in Obstetrics and Gynaecology, The Chilterns, Southmead Hospital, Bristol BS10 5NB, UK. E-mail: aruna2805@yahoo.co.uk

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Reply

Dr Arunakumari identifies several important points. The negative urine pregnancy tests remain puzzling since the ultrasound scan performed at 27 ± 2 weeks would suggest the Implanon® was inserted when the patient was about 8 weeks pregnant (i.e. 6 weeks after conception). This means, however, that organogenesis would not have been complete by the time of insertion.

Dr Arunakumari is, of course, correct that pregnancy is a contraindication to use of Implanon. However, the issue in this case, as in Dr Melrose's case, is that removal and postnatal re-insertion of Implanon at this late stage in pregnancy subjects the patient to two extra