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References
7 Winchester, UK
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Serious morbidity with long-term IUD retention

We have recently encountered four patients with serious intraperitoneal sepsis over an 18-month interval (2007/2008). Each was associated with long-term retention of a copper intrauterine device (IUD), which was identified as the likely source of infection. The IUDs had been in situ for 8, 15, 18 and 20 years, respectively. Three women were several years into their menopause. All four women presented as systemically unwell with a complex pelvic mass. One had ulcerative obstruction at the site of the abscess, simulating a gynaecological malignancy. In all cases laparotomy was technically difficult owing to the inflammatory pelvic mass adhering to bowel. Intermediate or prolonged hospitalisation resulted and, without interuterine care, two of the women would probably have died.

Pelvic actinomycosis was reported in the two patients’ histories. Cultures of frank pus grew Actinomyces naeslundii illustrating the clinical detection of pelvic actinomycosis. The remaining two patients were treated with podophyllotoxin, with no further problem in the fourth woman. In 2004 she had undergone appendicectomy, which showed
severe subserosal inflammation without mucosal inflammation leading to the conclusion that the source was elsewhere within the abdomen or pelvis. It is speculative that this episode 4 years after the last menstrual period (LMP) was over the age of 50 years, or 2 years after the LMP is under the age of 50 years. Two recent papers reported on consensus opinion and acknowledge that insertion-related risks are minimised by reducing the frequency of IUD changes. National guidance places strong emphasis on when removal is safe from a contraceptive point of view. There is no clear mention of the need for removal once the contraceptive action is no longer required, or of the risks of failing to do so. The frequency with which ALOs are reported in routine smears rises in a linear fashion with the duration of use of devices. ALOs are more common with certain types of IUD and uncommon with the levonorgestrel intraretine system. Pelvic actinomycosis is an uncommon and poorly understood condition, but has been recognised to complicate prolonged contraceptive use. Current FSRH Guidance recommends that, based on expert opinion, the risk of infection in the 20 days following replacement of an IUD outweighs the risk of extending use until the menopause. In this situation, the IUS can be continued until 1 year after the last menstrual period (LMP), or 2 years after the menopause if the LMP occurs under the age of 50 years. It is interesting, since being asked to respond on behalf of the CEU, a 70-year-old woman presented to my gynaecology clinic with vaginal discharge and an IUD that had been in situ for 30 years. The threads of the IUD were visible and the patient had attended her GP practice after the menopause for cervical smear tests. She claimed that she had asked the practice nurse about removal of the IUD but had been reassured that it was not necessary. It is not clear how many IUD users retain their IUD after the menopause and what proportion of these women develops complications. However, the cases described by Pillai et al. highlight the potential for life-threatening infection and a lack of awareness of the need for IUD removal among some IUD users and health professionals. Current FSRH Guidance recommends that, based on expert opinion, when no longer required the importance of timely removal of an IUD, once its contraceptive properties are no longer required. Women should be made aware that long-term retention may rarely result in serious complications with pelvic actinomycosis and/or actinomycosis. There should be more emphasis on timely removal of an IUD early in the menopause. This is not included in existing professional guidance and patient information leaflets.

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References

Reply

With regard to the four cases of serious pelvic infection described by Pillai et al., the Clinical Effectiveness Unit (CEU) acknowledges that long-term retention of an intrauterine device (IUD) is associated with infection and that the risk of actinomycotic pelvic abscesses increases with duration of use. For this reason, Faculty of Sexual and Reproductive Healthcare (FSRH) Guidance recommends that an IUD is removed at the end of its licensed duration or when no longer required. In women having an IUD inserted between the age of 40 years and the menopause, FSRH Guidance recommends that, based on expert opinion, the risk of infection in the 20 days following replacement of an IUD outweighs the risk of extending use until the menopause. In this situation, the IUS can be continued until 1 year after the last menstrual period (LMP), or 2 years after the menopause if the LMP occurs under the age of 50 years.

Interestingly, since being asked to respond on behalf of the CEU, a 70-year-old woman presented to my gynaecology clinic with vaginal discharge and an IUD that had been in situ for 30 years. The threads of the IUD were visible and the patient had attended her GP practice after the menopause for cervical smear tests. She claimed that she had asked the practice nurse about removal of the IUD but had been reassured that it was not necessary. It is not clear how many IUD users retain their IUD after the menopause and what proportion of these women develops complications. However, the cases described by Pillai et al. highlight the potential for life-threatening infection and a lack of awareness of the need for IUD removal among some IUD users and health professionals. Current FSRH Guidance recommends that, based on expert opinion, when no longer required the importance of timely removal of an IUD, once its contraceptive properties are no longer required. Women should be made aware that long-term retention may rarely result in serious complications with pelvic actinomycosis and/or actinomycosis. There should be more emphasis on timely removal of an IUD early in the menopause. This is not included in existing professional guidance and patient information leaflets.

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References

Letters to the editor

Intrauterine Contraception Nov 07.pdf [Accessed 10 August 2008].

The patient, a 39-year-old woman, was fortunate never to have had a headache until the events reported here. In early 2007, the patient started to complain of severe menorrhagia. Her periods were heavy and lasted 14 days, and necessitated the use of 15–20 sanitary pads a day. Tranexamic acid 1000 mg qds was tried initially for 8 weeks but the heavy bleeding continued. Nonsurgical therapeutic treatment with levonorgestrel IUS was tried for many months resulting in a mild improvement. In desparation, the patient was referred to a gynaecologist who felt that the next step was to insert a levonorgestrel-releasing IUS. This was duly done. Within 6 hours of inserting the IUS the attacks started. All the patient’s attacks (averaging 5–7 attacks/day) were similar. All were left sided and of long duration. An attack started with pain to the side of the left eye that the patient described as unbearable, like the worst toothache ever. Associated with the pain was painless tearing from the left eye, although the pain was so bad the patient also cried with her right eye. Her palpable fissure narrowed, her nose ran and her eye became pink. Her face felt strange and numb though painful. Touching her face, or brushing her hair or her teeth, did not trigger an attack. The attacks continued daily for 4 weeks until the patient came to see me.

As she entered the room, an attack started. Following the attack I removed the patient’s IUS very easily and gave her a zolmitriptan nasal spray. In case she had further attacks I was asked to see her 7 days later, at which time she appeared to be a completely different person. She had suffered one further attack some 6 hours after the IUS was removed and had been left with a very heavy menorrhagia. After this her attacks had totally stopped. At that clinic visit, in order to help her menorrhagia, which still raged, I started the patient on norethisterone again. Eighteen months later she is still totally free of attacks, and although her bleeding is still very heavy, she is not prepared to even consider allowing me to reinstate her intrauterine device/system, with or without hormones. She says the pain was the worst pain she could ever imagine and as a result she would never, even for the purposes of research, have an IUS inserted again.

This woman appeared to develop a TAC, which approximated most closely to a cluster headache. Unfortunately, she had had a hysterectomy because of endometriosis, and the IUS itself, but the hormone present in the IUS, which triggered the attacks, however this seems unlikely. The patient had already had very large doses of norethisterone which approximated most closely to a cluster headache. The attacks started within minutes. It might be argued that it was not the IUS itself, but the hormone present in the IUS, which triggered the attacks, however this seems unlikely. The patient had had large doses of progestogen prior to IUS insertion with no ill effects and has also had large doses following IUS removal. The progestogen dose in the TAC effective treatment was 400 micrograms and unlikely have reached a high level after only 6 hours. Conversely, if the problem were the hormone in the IUS, its removal would be unlikely to cause the hormone level to decrease significantly in 6 hours.

In summary, on the face of it this would appear to be a simple case of a woman having an IUS inserted and developing a TAC, which would be rapidly cured by removing the device. I would be delighted to discover if any of the Journal’s readers have observed a similar case.

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Informed consent for IUD fitting

Perforation of the uterus is a rare complication of intrauterine device (IUD) fitting. It is quoted as occurring in up to 1 in 2000 insertions.1 Risk factors for perforation include previous caesarean section2 and postpartum insertion up to 6 months after delivery.3

Corporation may occur during the sounding of the uterus or the device itself may perforate the uterus. This can lead to the device being free in