

cavity and atrophy of the endometrium.⁵ As a consequence the IUD is pulled upwards, the threads can disappear and the IUD is apparently 'lost'.

When the threads of an IUD are not visible, ultrasonography has been recommended to establish the location of the IUD within the uterus. However, a study by Reiertsen confirmed that whilst reliable in detecting IUDs in utero, ultrasonography is not helpful in detecting cases of penetration into the uterine wall.⁶

If routine retrieval methods fail, for the reasons alluded to previously, then most 'apparently lost' IUDs can be both located and then simply and safely removed using hysteroscopic aid.⁷ Nevertheless some instances, as the present case illustrates, require more extensive surgery.

Currently the evidence would appear to suggest that IUDs are, for the most part, safe and indeed perhaps beneficial, beyond their contraceptive use, in the short to medium term. However, bleeding and removal difficulties do occur and would logically seem to be a function of time and/or hormone deprivation. It is important as practitioners inserting IUDs that we enquire about their removal. Generally removal is recommended 1 year following the menopause if this occurs after the age of 50 years, and 2

years after the menopause if this occurs before the age of 50 years. It will be interesting to see if these complications will be seen more commonly with the increasing use of the Mirena[®] intrauterine system as part of the hormone replacement process.

Statements on funding and competing interests

Funding. None identified.

Competing interests. None identified.

References

- 1 Cheng D. The IUD: still misunderstood after all these years. *South Med J* 2000; **93**: 859–864.
- 2 Smith D. Long term IUD user at menopause. The case of a woman who wore an IUD for 14 years. *S D J Med* 1987; **40**: 5–6.
- 3 Sturgeon SR, Brinton LA, Berman ML, et al. Intrauterine device use and endometrial cancer risk. *Int J Epidemiol* 1997; **26**: 496–500.
- 4 Benschushan A, Paltiel O, Rojansky N, et al. IUD use and the risk of endometrial cancer. *Eur J Obstet Gynecol Reprod Biol* 2002; **102**: 166–169.
- 5 Reiertsen O. Real-time ultrasonography for location of IUDs. *Contracept Deliv Syst* 1981; **2**: 163–169.
- 6 Trivedi SS, Goel M, Jain S. Hysteroscopic management of intrauterine contraceptive devices with lost IUCD strings. *Br J Fam Plann* 2000; **26**: 229–230.
- 7 Goldberg MF, Albee RB. Difficult removal of an intrauterine contraceptive device associated with perimenopausal atrophy. *Fertil Steril* 1978; **30**: 478–479.

CASE REPORT

Intrauterine fragmentation of Gyne T380[®]: an uncommon complication

Anagha Nadgir, MRCOG, DFFP, Associate Specialist, Contraception and Reproductive Health Services, Middlesbrough Primary Care Trust (PCT); **Deborah Beere**, MFFP, DSM, Lead Consultant, Contraception and Reproductive Health Services, Middlesbrough PCT; **Keith Barker**, MRCG, DFFP, General Practitioner, Langbaugh PCT and Sessional Clinical Medical Officer, Middlesbrough PCT, Middlesbrough, UK

Correspondence: Dr Anagha Nadgir, Contraception and Reproductive Health Services, 23–27 Middlesbrough Road, South Bank, Middlesbrough, Teesside TS6 6NW, UK. Tel: +44 (0) 01642 459583. E-mail: anagha.nadgir@nhs.net

(Accepted 29 March 2004)

Journal of Family Planning and Reproductive Health Care 2004; **30**(3): 175–176

Abstract

A case of intrauterine fragmentation of a Gyne T380[®] intrauterine device (IUD) is described that was detected during removal of the device. Pelvic ultrasound failed to detect the fragment. Subsequently the woman reported spontaneous expulsion of the device. A description of this uncommon complication of IUD use, diagnosis, management and the need for awareness of the possibility of spontaneous expulsion of the fragment are discussed.

Case report

A 30-year-old woman attended our contraception advice clinic in March 2003 for removal of her intrauterine device (IUD) because she wanted to conceive.

A Gyne T380[®] IUD (Janssen-Cilag) was inserted in August 2000 on Day 7 of the patient's menstrual cycle without any difficulty. The IUD threads were in situ at her 6-week and annual checks.

The patient did not have any unacceptable alteration in her menstrual cycle and she did not have dysmenorrhoea. Overall she was very happy with this contraceptive method.

She had one child born in 1995 by spontaneous vaginal delivery at term. She had no medical or surgical history of significance.

When removal of the IUD was attempted a fragment of

the transverse arm of the IUD was found to be missing (Figure 1). A pelvic ultrasound scan failed to locate the missing fragment. While the patient was waiting for a diagnostic hysteroscopy she reported spontaneous expulsion of the fragment during her menses.

Discussion

Although the Gyne T380 IUD is no longer available, some women may have the device in place until 2009. The manufacturer's medical information department have confirmed that there have been no reported cases of fragmentation of Gyne T380 devices during their removal. The literature includes reports of this complication in Multiload[®] Cu250 device users^{1–3} and one case report in a Lippes[®] loop user.⁴

Although shedding of the copper wire is not uncommon in long-term IUD users, intrauterine fragmentation of the IUD frame is a rare complication. Fragments of IUDs have been observed to remain in the uterus after removal. This situation can result in perforation of the uterine muscle, migration into the abdominal cavity, and an increased risk of infection if the fragment perforates the intestine.⁵ Sonography, X-ray and computed tomography are not always successful in identifying the fragment and depend on the location of the fragment and the presence or absence of X-ray contrast. In this situation hysteroscopy is indicated

Case Report

to enable detection and removal of the IUD fragment. Feng et al. have reported that hysteroscopy is of great value in the management of patients with broken and/or embedded IUD fragments.⁶

If, however, the fragment has penetrated far into the myometrium, a diagnostic laparoscopy to rule out an abdominal uterine defect should be done. If the fragment remains undetectable on laparoscopy then surgical removal by laparotomy is recommended since serious infections can occur if the fragment perforates the intestine.⁵

This case report highlights two important clinical issues:

1. The need to carefully inspect an IUD after it has been extracted by medical staff and/or the need to advise the woman to carefully inspect the device for any missing fragments if it has been expelled spontaneously.
2. If a fragment is found to be missing then it is necessary to instruct the woman to be on the alert for spontaneous expulsion of the missing fragment (especially during menstruation) before any invasive procedures are undertaken to locate the missing device.

Statements on funding and competing interests

Funding. None identified.

Competing interests. None identified.

References

- 1 Custo G, Saitto C, Cerza S, et al. Intrauterine rupture of the intrauterine device "ML Cu 250" an uncommon complication: presentation of a case. *Fertil Steril* 1986; **45**: 130-131.
- 2 Danero S, La-Rosa R, Mazzini M, et al. Intrauterine rupture of ML Cu 250 device. Report of two cases [in Italian]. *Patol Clin Ostet Ginecol* 1987; **15**: 166-168.
- 3 Wagner H, Scheweppe KW, Beller FK. Fragmentation of intrauterine contraceptive devices during their extraction [in German]. *Geburtshilfe Frauenheilkd* 1983; **43**: 123-126.
- 4 Burry KA, Pernoll ML. The fragmented intrauterine device: an unusual complication of a Lippes loop. *Fertil Steril* 1978; **29**: 218-219.
- 5 Kabrowski B, Schneider HP. Removal of an occult intrauterine fragment of an intrauterine device under hysteroscopic control [in German]. *Gynakologische Rundsch* 1986; **26**: 210-214.
- 6 Feng ZC, Shi YP, Wu XZ, et al. The application of hysteroscopy in diagnosis and treatment of missing intrauterine devices. *Gynaecol Endosc* 2001; **10**: 61.

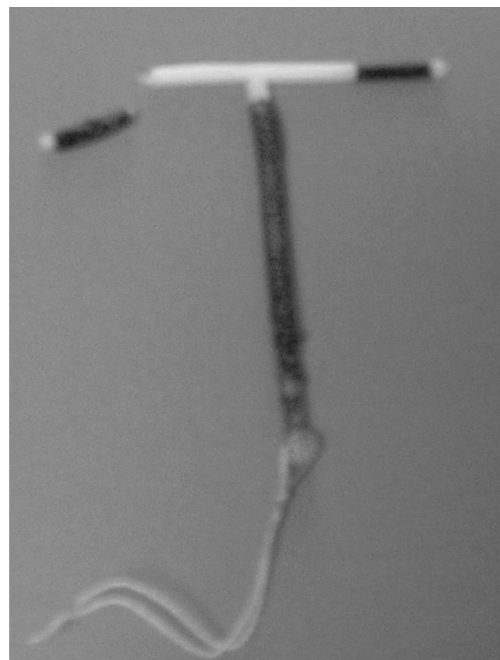


Figure 1 The broken Gyne T380® device



Termination of Pregnancy

Fast, confidential, caring. The professional choice.

Marie Stopes International is a leading charity in the field of family planning. We work closely with the NHS to provide termination of pregnancy services and are also happy to accept private referrals.

At centres around the UK we offer a professional and convenient service. You can trust us to take care of the patients you refer. We're discreet, confidential, sympathetic and will do everything we can to make a difficult time easier. Patients can also rely on our full aftercare service including post abortion counselling.

If your patient would like an appointment or if you would like to find out more about us, simply call the number below. We will be happy to send you an information pack containing full details of our services and some easy to use referral forms. Alternatively, you can visit our web site.

Call us on 0845 300 12 12

or visit www.mariestopes.org.uk



**MARIE STOPES
INTERNATIONAL
UK**