CASE REPORT

Chronic Cervical Perforation by an Intrauterine Device

Semra Oruç Koltan, Aslı Göker Tamay*, Yasemin Yıldırım

Department of Obstetrics and Gynecology, Faculty of Medicine, Celal Bayar University, Manisa, Turkey.

The intrauterine device (IUD) is a widely used, highly effective method of birth control. Uterine perforation is a rare yet serious complication and is usually seen during insertion of the IUD. A regular examination is necessary for follow-up. We present a patient with an IUD that had perforated the cervix. The diagnosis was made during routine gynecological examination, and the patient was treated in a timely manner before any complications such as ectopic pregnancy, intrauterine pregnancy, infection or irreversible harm to the cervix arose. This case stresses the importance of regular visits to maintain health and diagnose possible adverse effects of intrauterine contraceptive methods. [*J Chin Med Assoc* 2010;73(6):325–326]

Key Words: cervical perforation, contraception, intrauterine device

Introduction

The intrauterine device (IUD) is a widely used method of contraception. It is reliable when inserted by professional health providers. Some complications such as infection, expulsion and perforation are inevitable. Uterine perforation caused by an IUD is an uncommon complication that occurs in approximately 1/1,000 insertions.[1] Uterine perforation might be considered as the most important complication because it can lead to either intrauterine or extrauterine pregnancy and can even be life-threatening. Experiencing a pregnancy while using an IUD will be at least demoralizing, and when it happens to be an extrauterine pregnancy, the consequences can be even more serious. The important point is to keep patients in routine follow-up and to encourage complaint-free women to stay on a regular check-up schedule with their gynecologists.

Case Report

We present a 32-year-old woman, gravida 4, para 2, who visited the gynecology outpatient clinic of Celal Bayar University Faculty of Medicine in Manisa, Turkey. She had no complaints and was undergoing her routine annual check-up. Her gynecological history revealed dilatation and curettage twice for an indication of missed abortion, 9 and 12 years before this visit, respectively. She had undergone a cesarean section 4 and 9 years previously. She was using an IUD as a contraceptive method. The IUD had been inserted 3 years before by a gynecologist in another medical institution, and the patient had not experienced any discomfort whatsoever since then. She was menstruating with a regular pattern and on her 8th menstrual day. On gynecological examination, the perineum, vulva and vagina were observed to be normal, the uterus was retroverted and of normal size, and the adnexes were non-palpable. On speculum examination, the cervix was of nulliparous appearance and the string of the IUD was seen at the external os. About 1.5 cm above the cervical os, the copper end of the IUD was observed protruding outwards from the cervix (Figure 1). Transvaginal ultrasound showed a 5-mm endometrium, a regular-appearing uterus and bilateral normal adnexa, and a dislocated IUD. The patient was hospitalized. Under general anesthesia, the IUD was removed from the site of perforation. No complication occurred and she was discharged on the following postoperative day.

*Correspondence to: Dr Aslı Göker Tamay, Department of Obstetrics and Gynecology, Faculty of Medicine, Celal Bayar University, 45040 Manisa, Turkey.
E-mail: asligoker@gmail.com • Received: June 19, 2009 • Accepted: March 26, 2010

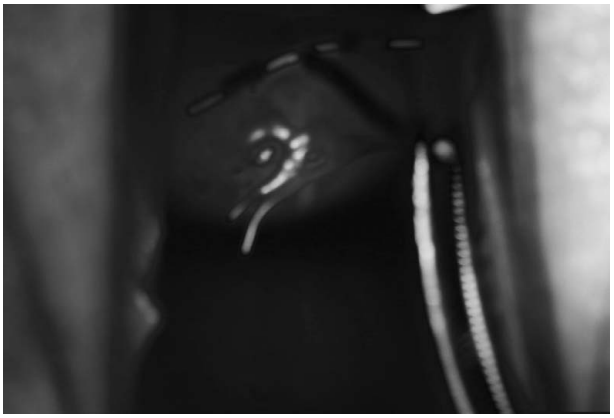

Figure 1. End of the IUD protruding outwards from the cervix.

Discussion

The IUD is a highly safe and widely used contraceptive method, but sometimes complications can occur. Infection is the most frequent complication seen in IUD users, and ectopic pregnancy is another complication that is often related to device dislocation.[1] Perforation of the uterus by an IUD is a rare but serious complication. IUD perforation of the uterus and migration to the colon,[2] bladder,[3,4] ureter[5] or fallopian tubes[6] have been reported. Such perforations are generally observed when the insertion is performed promptly after vaginal delivery or curettage. These patients generally complain of abdominal pain or cramps, usually have menstrual abnormalities, and even experience pregnancies. An IUD that migrates to the bladder can cause extraurinary symptoms such as chronic pelvic pain or urinary symptoms such as pyuria or stone formation. When the strings of the IUD are lost and the device cannot be seen by ultrasonography, X-ray or tomography can be used for visualization. In the present case, the IUD and string were both observed at the cervical os. Signs of an adverse medical condition can be regarded as an opportunity for the patient to seek medical care. However, it is more important to be on a regular check-up schedule. In the case reported here, the patient had no symptoms of menstrual irregularity, hematuria, abdominal pain or dyspareunia. There were no symptoms related to the dislocated IUD. The routine check-up examination for this patient prevented her from becoming pregnant and spared the cervix from further damage. As far as we are aware, there is only 1 case reported in the literature with cervical perforation caused by an IUD after methyl ergonovine maleate administration.[7] Our patient had completely spontaneous dislocation of the IUD with perforation of the cervix. The time when the dislocation occurred remains unknown.

IUDs must be inserted by a professional, and patients advised to undergo regular gynecological examinations. It is also important to instruct patients about self-examination. Our patient increased her chance of preventing further complications by undergoing an annual check-up.

References

1. Glasier A. Contraception. In: Edmonds KD, ed. *Dewhurst's Textbook of Obstetrics and Gynaecology*, 7th edition. Maldon, MA: Blackwell Publishing, 2007:299–317.
2. Chi E, Rosenfeld D, Sokol TP. Laparoscopic removal of an intrauterine device perforating the sigmoid colon: a case report and review of the literature. *Am Surg* 2005;71:1055–7.
3. Mülayim B, Mülayim S, Çelik N. A lost intrauterine device. Guess where we found it and how it happened? *Eur J Contracept Reprod Health Care* 2006;11:47–9.
4. Akgül KT, Yalçın K, Polat O, Ayyıldız A, Germiyanoğlu C. Mesaneye Rahim İçi Araç Migrasyonu ve Mesane Taşı. *Türk Üroloji Dergisi* 2007;33:360–1. [In Turkish]
5. Sirikci A, Sarica K, Bayram M. Ureteral displacement due to a migrated intrauterine contraceptive device. *Urol Int* 2000;65:179–80.
6. Wikland M, Wilhelmsson L. A rare case of IUD expulsion through the fallopian tube. *Acta Obstet Gynecol Scand* 1983;62:191–2.
7. Ben Baruch G, Lev-Ran D, Rabau-Friedman I. Cervical perforation by an intrauterine device after methylergometrine maleate administration. *Harefuah* 1979;96:485. [In Hebrew]