CLINICAL CASE

Translocation of an intra-uterine contraceptive device with sigmoid penetration through an endometriotic nodule

Perforation sigmoïdienne par un stérilet à travers un nodule d’endométriose

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Summary The intra-uterine device (IUD) is the most common existing reversible contraception. Uterine perforation occurs in 0.6 to 3.4 per 1000 insertions. We describe the first report of IUD translocation and subsequent penetration of the sigmoid through an endometriotic nodule. A 44-year-old gravida 2 para 2 woman consulted for rectal bleeding and melena. Rectosigmoidoscopy revealed ischemic colitis secondary to the use of NSAIDs, which explained the bleeding, but also sigmoid perforation from part of an intra-uterine device. This was discovered by chance. Perforation had occurred though an endometriotic nodule.

Résumé Le stérilet est le moyen de contraception réversible le plus utilisé. Une perforation utérine survient dans 0.6 à 3.4 pour 1000 insertions. Nous rapportons le premier cas de perforation sigmoïdienne par un stérilet à travers un nodule d’endométriose. Une femme de 44 ans, G2 P2 a consulté pour rectorragies et méléna. Au cours de la rectosigmoidoscopie, nous avons découvert une colite ischémique secondaire à la prise d’AINS expliquant le tableau clinique, mais également une branche du stérilet qui avait perforé le sigmoïde. Cette découverte a été fortuite. Cette perforation s’était faite à travers un nodule d’endométriose.

Introduction

The intra-uterine contraceptive device (IUD) is the most common reversible contraceptive in the world. The frequency of IUD uterine perforation has been estimated between 0.6 and 3.4 per 1000 insertions. Eighty-five percent of perforations do not affect other organs, but the remaining 15% lead to complications in the adjacent visceral organs usually the intestines [1]. The migration of the IUD is asymptomatic in one third of the cases (18/31) [2–7]. When the migration is symptomatic, the symptoms are pain associated or not with fever. Bleeding is rare [2–7]. We report a case of IUD uterine perforation with subsequent

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Figure 1  Rectosigmoidoscopy: sigmoid perforation by the IUD.

penetration into the sigmoid through an endometriosic nodule.

Case report

A 44-year-old woman consulted for rectal bleeding and melena, diarrhoea and abdominal pain. Initial laboratory tests revealed haemoglobin: 12.4 g/dL, hematocrit: 37%. There was no hemodynamic failure (pulse: 100, blood pressure: 145/99). The clinical examination was normal. The patient’s physician had prescribed an NSAI (diclofenac) for lumbago for 5 days before the symptoms occurred. The previous history included two slipped discs, gravida 2 para 2, and insertion of a copper IUD (TT 380®) 31 months before without complications.

Rectosigmoidoscopy was performed and revealed linear ulcerations from the splenic flexure. The upper limit of the lesions could not be identified because of pain during the endoscopy. This lesion was the cause of the symptoms and corresponded to ischemic colitis secondary to NSAI administration. Part of an IUD was discovered at the level of the sigmoid which had perforated the wall (Fig. 1).

One day later, the patient underwent surgical treatment by laparoscopy. The surgeon found endometriosis in the Douglas pouch. There was an adhesion between the uterus and the sigmoid due to an endometriosic nodule. The IUD string was found in the nodule (Figs. 2–4) and the IUD was completely embedded in the digestive wall. Partial sigmoidectomy was performed.

There were no complications. The patient was released 5 days later.

Discussion

This is the first case of IUD translocation with subsequent penetration of the sigmoid through an endometriosic nodule. Endometriosis is a frequent pathology, which affects 1 to 2% of women. The gastrointestinal tract is the third most common localization of endometriosis, after the ovaries and the peritoneum, and affects 5% of the women with this
condition. Sigmoid and rectal endometriosis concern 70% of cases of intestinal endometriosis. In this case, IUD translocation may have been favored by chronic local inflammation due to endometriotic lesions and adhesions between the uterus and sigmoid. In the literature, factors facilitating migration are the insertion of the IUD in the early postpartum period, the operator’s experience, the design of the device and the thickness of the uterine wall [2,3]. Prolonged amenorrhea may cause myometrial hypoplasia and thus make perforation more likely.

Perforation and embedding following insertion of IUD are not frequent. Zakin and al. [1] reviewed 356 cases and found 41 cases in the intestines: 14 intestinal obstructions, six perforations of the small bowel, nine rectosigmoid perforations, five perforations of the caecum or appendix, and seven perforations of the mesentery or mesoappendix small bowel.

Our review of the literature showed 19 cases of IUD sigmoid perforations [4,5,8]. The interval between insertion and migrations varied from 5 months to 8 years. Our case falls within this interval. In 18 cases, the IUDs were removed by surgical procedure. In one case [8], the IUD was removed by a biopsy forceps during sigmoidoscopy. The patient received antibiotic therapy for 4 days and there were no complications.

When rectal perforation occurs, IUD retrieval through the rectal route is fairly common (8 cases/11) [5—7]. This procedure appears to be safe because no complications have been described, but it is only possible if the IUD is free in the lumen or partly embedded. The technique for removing a translocated IUD depends on its location, the extent of adhesions and the experience of the operator. Surgical treatment of a uterine lesion is rarely necessary (2 cases) [5—7].

**Conclusion**

IUD migration is a rare but severe complication of this form of contraception. Treatment usually requires surgery. Surgery can be avoided if the IUD is partly embedded in the rectal wall, with retrieval during rectosigmoidoscopy. The procedure seems to be safe because no complications have been described in the literature (8 cases).

**Consent**

Written informed consent was obtained from the patient for publication of this case report and accompanying images.

**Conflict of interests**

No potential conflict of interest relevant to this article was reported.

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**References**


