

Migration of intrauterine device to the rectum: endoscopic removal

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ABSTRACT

The intrauterine device (IUD) is one of the most used contraceptive methods due to its safety and effectiveness. It is generally well tolerated, however, there are complications such as expulsion, uterine perforation and migration. Rectal migration of the device is a rare complication, with few cases described in the literature. We present a 21-year-old female patient with rectal migration of the IUD and its removal by endoscopy.

Keywords: *intrauterine device, rectal migration, endoscopy*

INTRODUCTION

Intrauterine devices constitute 23% of reversible contraceptive measures worldwide. Although it is considered an effective and safe method, its use can present complications, of which the most serious are uterine perforation and device migration. Rectal migration is a rare complication; according to our bibliographic search, there are 22 cases published in the world. We consider that the decision on how to remove the device should be case-specific, according to its exact location and the size of the fistulous orifice, if found. For this, imaging methods are important, as well as endoscopy, which can also be useful for therapeutic purposes, as we will demonstrate in this case.

CASE

A 21-year-old female patient with a history of intrauterine device (IUD) placement in October 2021 attends the clinic due to a foreign body sensation and threads coming out of the anal canal. During the proctological examination, the threads of the device are evident (Fig. 1). During the digital rectal examination, a tonic sphincter and smooth rectal mucosa are observed, and approximately 8 cm from the anal verge a foreign body is palpated on the anterior wall. A transvaginal ultrasound reports the presence of the IUD outside the uterine cavity. A pelvic X-ray shows the IUD in the presacral region, in rectal topography (Fig. 2). Hysteroscopy and colonoscopy are scheduled under sedation. In the hysteroscopy, performed first by the Gynecology Service, the IUD is not

found in the uterine cavity. The mucosa is intact and there is no evidence of communication with the rectum.

Next, during colonoscopy, the IUD is identified 10 cm from the anal verge, on the anterior wall of the rectum. Its extraction is achieved with an endoscopic foreign body forceps (Fig. 3). The defect through which the device had protruded is less than 5 mm, with no evidence of bleeding. The presence of a rectouterine fistula was ruled out, inferring that the device compromised only the wall of the rectum. The patient is discharged after 6 hours. She is scheduled for subsequent outpatient checkups.



Figure 1. Proctological examination. IUD thread can be seen coming out through the anus.

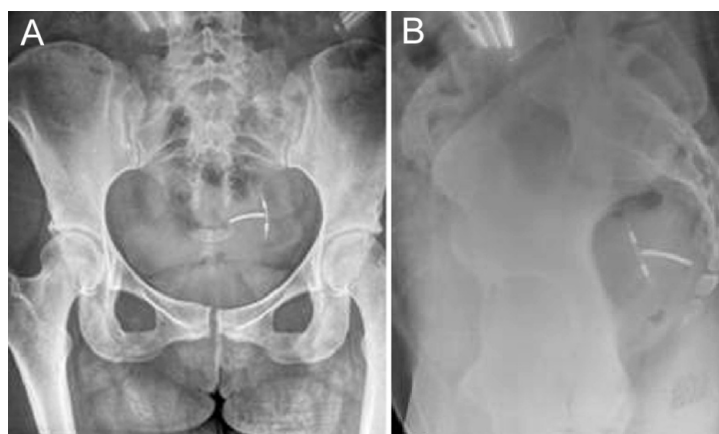


Figure 2. Pelvic X-ray. A. Anteroposterior view. IUD migration. B. Lateral view. The IUD is seen in the presacral area.

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Received: October 2, 2023. Accepted: January 30, 2024

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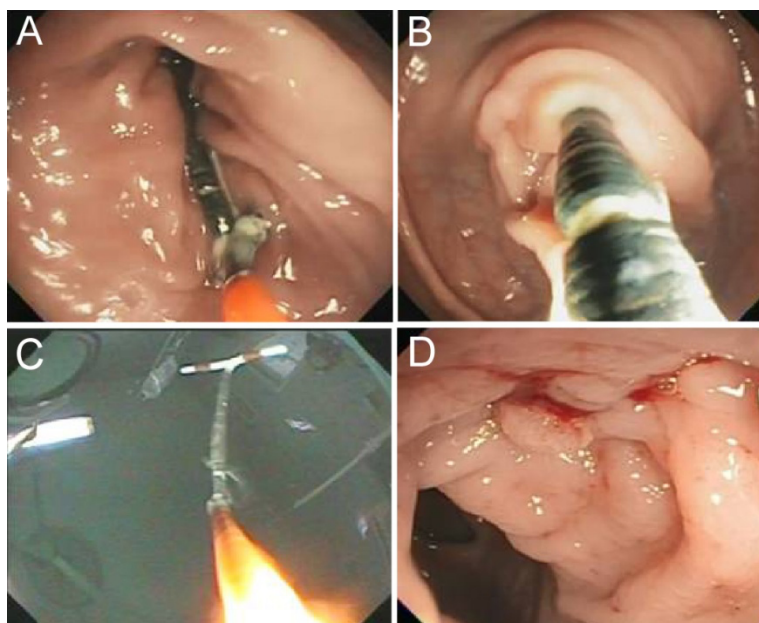


Figure 3. Colonoscopy. **A and B.** Endoscopic removal of IUD located in the rectum. **C.** IUD outside the rectal cavity. **D.** Endoscopic control after removing the IUD.

DISCUSSION

The IUD is a safe and effective contraceptive method, with the “T” type with copper being the most used worldwide.¹ Its possible complications include bleeding, ectopic pregnancy, uterine perforation, infection and, less frequently, migration or fistula formation into the digestive system. The incidence of migration varies between 0.2 and 0.87 per 1,000 insertions, although significant under-registration is recognized. Risk factors that predispose to this complication include the use of copper IUD, placement during lactation or less than 6 months after delivery, postpartum amenorrhea, retroverted uterus, nulliparity, history of abortion, and limited staff experience of the health personnel, among others.²

Uterine perforation with migration is considered primary or immediate if it occurs during IUD insertion due to penetrating injury to the myometrial tissue. However, it can also occur secondarily or late due to gradual erosion through the myometrium. The clinical presentation of early migration usually manifests with sudden and intense pain and/or genital bleeding. On the other hand, in late perforation the interval between insertion and diagnosis can vary from days to several years, although it usually occurs during the first months and up to a year after insertion.³⁻⁴

Migration due to uterine perforation should be considered in case of non-visualization of the device or its visualization outside its normal location within the uterus, using transvaginal and/or transabdominal ultrasound, as well as simple abdominal x-ray, abdominopelvic computed tomography with contrast or magnetic resonance imaging.⁵

When a perforation is identified, it is recommended to remove it as soon as possible, regardless of the type of device and its location. Endoscopic techniques can be used, either colonoscopy, hysteroscopy or cystoscopy depending on the location.⁶

Rectal perforation due to IUD, generally oligosymptomatic, is rare, with few cases described in the literature. Although rectal migration involves communication with the genital tract, the question is whether it will lead to a fistula or not. In the literature analyzed, no rectovaginal or rectouterine fistulas due to migration of the IUD have been described, although cases of fistulas to the small intestine and colon have been reported.

After identifying the device in the rectum, a complete endoscopic removal may be feasible. The type of material favors a

low reaction to foreign bodies. This condition, added to the mostly extraperitoneal rectal anatomy, determines a usually safe endoscopic removal, without significant injury to the surrounding tissues and with a minimal residual fistulous tract that is repaired spontaneously. A hole smaller than 0.5 cm can close spontaneously in these cases, however, for larger defects the use of endoclips or plasties is described.⁷

CONCLUSION

Perforation and rectal migration of the IUD, generally oligosymptomatic, is rare. It should be suspected when the device was not removed and its uterine location is not identified. The diagnosis is usually made by a simple X-ray or transvaginal ultrasound. It should be removed as soon as possible after diagnosis, even in asymptomatic cases. Complete endoscopic removal may be feasible and safe, and no cases of rectal fistulas after device migration and removal have been described in the literature.

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