

Research Letter

Rectum penetration that was caused by the displacement of an intrauterine device and mimicked rectal endometriosis

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The most severe complication of intrauterine device (IUD) insertion is uterine perforation; the incidence of perforation caused by IUDs ranges from 1.2 to 6.8/10,000 insertions [1,2]. Patients presenting with uterine perforation may experience pelvic pain or vaginal bleeding, or they may be asymptomatic, with the only sign being the absence of the IUD string at the external os of the cervix. About 15% of perforations lead to complications in adjacent organs, mostly in the intestines [3]. In this report, we have presented a rare case in which rectal perforation by an IUD presented as painless rectal bleeding during menstruation.

In this case, the patient was a 31-year-old woman (gravida 2 para 2) who had undergone IUD insertion 40 days after the delivery of her second child, 4 years ago. The patient had been experiencing painless rectal bleeding during menstruation in the recent months. No instances of abdominal pain, fever, or intermittent diarrhea were noted. The patient consulted the gynecological departments of another hospital, and was presumed to have rectal endometriosis. She received oral contraceptives, but the rectal bleeding persisted. Because the first treatment failed, the patient consulted our department; transabdominal sonography performed at our department revealed a dislocated IUD with uterine perforation, with the string of the IUD being visible during a speculum examination. An X-ray radiograph of the abdomen showed that the IUD was located in the abdominal cavity, and colonofibroscopy revealed that a part of the horizontal arm of the device had penetrated the rectosigmoid junction (Fig. 1). Furthermore, during laparoscopy, a thick adhesion between the rectum and uterus was found. After lysis of the adhesion, the IUD was removed under hysteroscopy (Fig. 2). A 0.5-cm

rectal defect was left without performing primary repair (Fig. 3). The patient showed a good postoperative recovery.

Uterine perforation is a rare complication caused by the use of IUDs, but it can cause serious morbidity and mortality. Perforations can occur during IUD insertion or at a later stage. An IUD can be safely inserted until 6 months after delivery [4], after which the chances of complication increase. Many factors, such as the type of IUD inserted, the uterine size and position, the timing of insertion, and the experience of the clinician, are associated with perforation. In patients who show congenital malformations or have undergone operations previously, uterine perforation may occur during insertion. Approximately 15% of perforations lead to complications in adjacent organs, mostly in the intestines [3] and at other sites

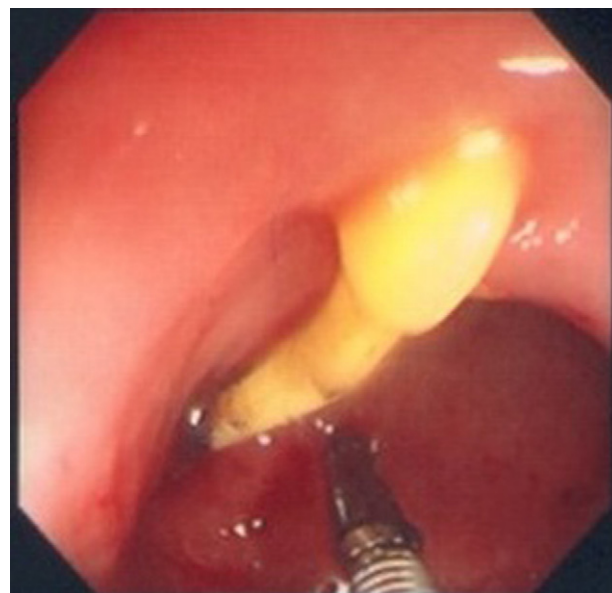


Fig. 1. Colofibroscopy: the arm of the intrauterine device had penetrated the rectosigmoid junction.

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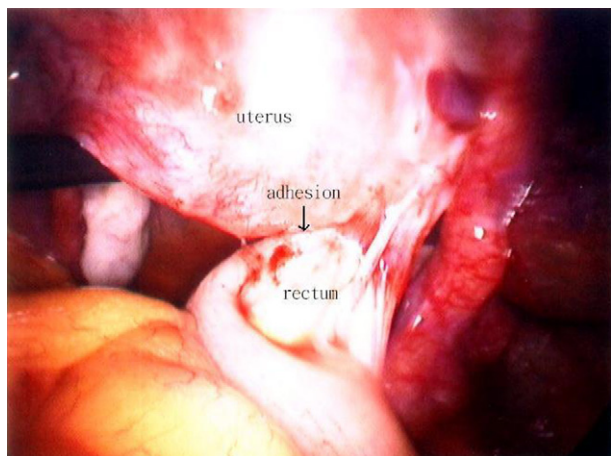


Fig. 2. Laparoscopy: adhesion between rectum and uterus was found.

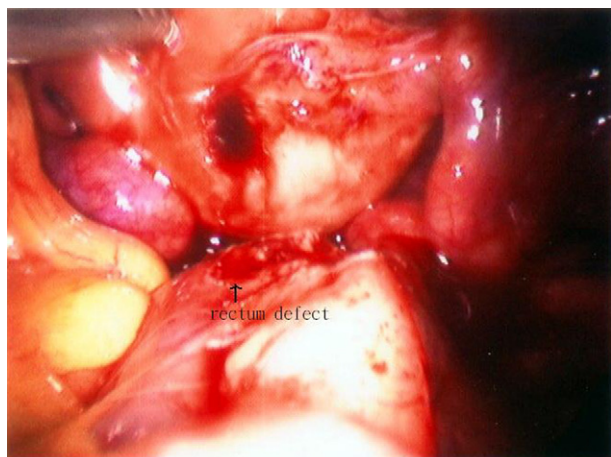


Fig. 3. After adhesiolysis of the thick adhesion, a 0.5-cm rectum defect was left without performing a primary repair.

such as the bladder [5] and the appendix [6]. The triad of symptoms, such as abdominal pain, fever, and intermittent diarrhea, which are associated with a dislocated IUD have been suggested as signs of bowel injury [7]. In our case, none of the symptoms of this triad was noted. The patient presented with only painless rectal bleeding during menstruation, and even the string of the IUD was not missing. The initial impression was that of rectal endometriosis. Transabdominal sonography is an easy, safe, and noninvasive method used to determine the exact position of the IUD. If the IUD is not seen in the uterine cavity, an X-ray radiograph of the abdomen may be useful for locating the missing IUD. The diagnosis of a dislocated IUD is made by clinical, sonographic, radiologic, or laparoscopic examinations. Other examinations such as cystoscopy for determining vesical perforations and colonoscopy for determining colon perforations are also performed. In cases like ours, it is essential to perform a colofibrosopic evaluation when a rectosigmoid perforation by an IUD is suspected. Once a dislocated IUD has been found, the decision to leave or remove it must be made. Markovitch et al [8]

suggested that although surgical removal of the misplaced IUD must be performed on symptomatic patients, conservative management may be useful under certain circumstances for asymptomatic patients. However, another recommendation is the immediate removal of the IUD because dislocation of the IUD to the peritoneal cavity may cause peritoneal or omental adhesions, volvulus, uterocutaneous fistula, and bowel perforation, which involve significant morbidity [9]. In cases of dislocation of the intra-abdominal IUDs, laparoscopic removal of the IUD must be the first-choice therapy [10]. If the bowel perforation has to be repaired or other severe conditions are present, laparotomy should be chosen. In our case, because the string could be seen at the external os of the cervix, the dislocated IUD was removed easily under hysteroscopy after laparoscopic dissection of the adhesion between the rectum and uterus. On the basis of the surgeons opinion, the 0.5-cm rectal defect was left without performing primary repair. In conclusion, IUDs are effective and relatively safe contraceptives. However, the insertion of the IUD may cause severe complications such as uterine perforation with damage to other organs. A number of symptoms may present in different cases.

In conclusion, uterine perforation must be presumed when a dislocated IUD is suspected, even when the patient presents with rare symptoms such as painless rectal bleeding during menstruation. Regular follow-up of patients who use IUDs by checking the visibility of strings and by performing sonography would help in the early detection of a dislocated IUD.

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