

Migration of an intrauterine contraceptive device into the sigmoid colon

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ABSTRACT

تعريف لحالة هجرة أو انتقال اللولب النحاسي المانع للحمل (IUCD) من داخل تجويف الرحم عبر الجدار إلى داخل جدار الجزء السفلي للأمعاء الغليظة، أو ما يعرف بالأمعاء السينية. تم استخراج اللولب عن طريق التنظير الشرجي السيني. الهدف من ذكر هذه الحالة، هو تأكيد إمكانية استخدام المنظار السيني أو ما يعرف بمنظار القولون لإخراج لولب منع الحمل (IUCD) المتواجد في جزء من جدار أو داخل تجويف القولون.

We present a case of migrating copper-T intrauterine contraceptive device (IUCD) into the bowel wall at the recto-sigmoid junction, and the colonoscopic retrieval of the device. This case introduces the possibility of safe rectal retrieval of migrating IUCD implanted into the bowel wall.

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The copper-T intrauterine contraceptive device (IUCD) is an effective and relatively safe contraceptive method used in developing countries. The incidence of IUCD uterine perforation is relatively low, around 0.5-1/1000 insertions.¹ Translocated IUCD has been associated with serious complications such as bleeding, ectopic pregnancy, migration, and perforation into surrounding organs. Perforation of the recto-sigmoid by a migrating IUCD is a rare complication. In a review of 356 cases of translocated IUCD, only 20 cases of intestinal perforation were reported, of which 9 involved the recto-sigmoid part.² Here, we report a case of migrating copper-T IUCD into the sigmoid wall,

and the colonoscopic retrieval of the device. We present this case to provide another non-surgical approach for retrieving a translocated IUCD from the bowel walls, and to stress the importance of IUCD location check-up, especially if pregnancy occurred.

Case report. A 37-year-old woman, presented to the outpatient surgical department with a history of recurrent attacks of bleeding per-rectum after giving birth to her fourth child 3 months ago. She had a copper-T IUCD fitted one and a half years ago. She reported that the device was not detected in the uterus during her ultrasonography pregnancy checkup visits. She was generally in good health with no gynecological or gastrointestinal complaints. On examination, her abdomen was soft and lax, not tender, and both her rectal, and proctoscopic examination was negative. Her vaginal examination was also negative. The plain abdominal x-ray showed the IUCD at the left side in the pelvis within the possible uterus location. Her colonoscopic examination, in the gastroenterology department, detected the IUCD thread in the proximal rectum, and the metal part was well embedded in the bowel wall, 16 cm from the anal verge at the recto-sigmoid junction (Figure 1). Due to its fixed implantation of the device into the bowel wall, it was not retrieved then. A CT of the abdomen with contrast revealed a T-shaped IUCD partially inside the lower third of the rectal lumen not causing any hemorrhage or localized collection. The device was completely outside the uterus as its extra rectal portion is seen seated within the Douglas Pouch. (Figure 2). She was admitted to the hospital and under general anesthesia in the operating theater, the IUCD was successfully retrieved by flexible sigmoidoscopy using a grasper. Two endoclips were applied at the site of retrieval. A gastrografin study revealed no leakage of contrast (Figure 3). She had an uneventful recovery and was discharged home the next day.

Discussion. Perforation of the uterus with migrating IUCD into the sigmoid wall is a rare but potentially serious complication associated with IUCD insertion. It can migrate to any part into the peritoneal cavity. There

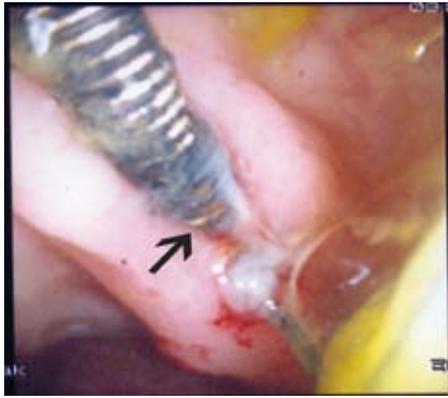


Figure 1 - The IUCD identified by flexible sigmoidoscopy 16 cm from the anal verge. The thread ended in a metal loop spring, which was embedded in the sigmoid colon wall. The arrow points to the lower thread part of the IUCD seen inside the lumen of rectum. IUCD - intrauterine contraceptive device



Figure 2 - A CT of abdomen and pelvis showing T shaped IUCD noted inside the lower third of the rectal lumen not causing regional collection, which was completely outside the uterus. The arrow points to IUCD in the colon wall. IUCD - intrauterine contraceptive device.



Figure 3 - Post-operative gastrograffin study showing no leakage of contrast. The arrow points to post colonoscopic retrieval of the IUCD from the bowel wall with no gastrograffin contrast leak into the surrounding tissues implying no perforation or injury.

have been cases reported with the IUCD migration into the omentum, appendix, sigmoid colon, rectum, bladder, and small bowel.^{2,3} It has also been reported that early puerperal insertion may trigger the migration, and perforation of the bowel. Many factors may also affect perforation. The IUCD related factors include the design, and structural characteristics of the device, and the nature, and the rigidity of the device. There are also factors related to the patient such as uterine size, and position, and any anatomical variation, and the timing of insertion relative to delivery or abortion time. Some patients may have no complaints, but others may have signs and symptoms of perforation such as pain, and bleeding from the rectum or vagina. Displacement of the IUCD should be suspected if the string, which is a thread attached to the end of the IUCD, is no longer visible at the external os, the outer opening of the cervix. There is still controversy among researchers whether to remove an uncomplicated migrating IUCD. Some studies advise the retrieval only of complicated and symptomatic migrating IUCD.⁴ Many cases of bowel perforation required surgical intervention ranging from simple closure of the bowel wall to resection of the segment involved.⁵ Perforation of the recto-sigmoid by a migrating IUCD was mainly managed by colonoscopic retrieval.⁶⁻⁹ Colonoscopic retrieval of the IUCD perforating the large bowel must be the first choice of therapy.^{10,11} As in our case, endoclips can be applied at the site of retrieval to prevent leaks. Contrast study on the operating table can also be performed to check up for leaks at the site of IUCD perforation.

In conclusion, the need for regular checkups of the IUCD after insertion is required to avoid future complications. Colonoscopic retrieval of a migrating IUCD into the colon or rectal wall is a successful and first choice of treatment. It is also advisable to do this under direct vision, so that, any bowel perforation during retrieval can be managed at the same time.

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