

An intrauterine contraceptive device: where did we find it after 29 years of insertion? A case report

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Abstract

Intrauterine contraceptive devices (IUCD) are one of the most popular and modern means of contraception used worldwide. Some described complications include perforation, infection and ectopic pregnancy. Herein we report an uncommon complication of IUCD: perforation and migration in the terminal ileum.

A 56-year-old woman presented to our institution with lower abdominal pain. She had had an IUCD placed 29 years previously. The IUCD was inserted in unsafe conditions since then it was prohibited in Romanian to use any contraception device or pills. The IUCD was placed clandestinely in uncertain condition and could never be checked after. An exploratory laparotomy evidenced the presence of IUCD migrated to terminal ileum.

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This case demonstrates an unusual localisation of an IUCD in the ileum, but the particularity is that we found it after 29 years of its insertion and the patient had no specific gastrointestinal symptoms.

Keywords: Intrauterine device, Ileum, Contraception, Case report.

Introduction

The intrauterine contraceptive device (IUCD) is considered as a safe and effective contraceptive method,

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used in developed and developing countries, and reported to be used by 1.8% of the United States population.¹ Uterus perforation from 0.05 and 13 per 1000 insertions have been reported earlier.²

Herein we report a case of uncommon complication of IUCD: perforation and migration in the terminal ileum.

Case Report

A 56-year-old post-menopausal woman presented in our clinic in October 2013 with pain in the right iliac fossa. She reported the onset of the pain as an intermittent discomfort for two months, especially in the right iliac fossa. She reported no other symptoms such as vaginal bleeding, nausea, weakness, dizziness, vomiting or fever.

Her medical and surgical history consisted of open appendectomy in childhood and two vaginal deliveries. She report that an IUCD was inserted when she was 27 years old. After four years, she wanted to remove the IUCD but the cervical thread was not apparent at the os cervix, and the device was not found during this procedure. One year later, she had her second spontaneous delivery and was informed that the device was lost and no other investigation was performed.

Examination on presentation revealed a haemodynamically stable patient with no signs of fever, jaundice or dehydration, but the patient was in distress and in pain. Her abdomen was soft and she had complained of marked right iliac fossa pain, but there was no tenderness. Vaginal speculum and rectal examination revealed no abnormality. The ultrasound scan report showed a normal sized, anteverted uterus with no visualisation of IUCD. There was a sonolucent cystic mass near the iliac vessels with an echodense mass inside. The left adnexa presented normal sonographic features. There was no fluid in the pouch of Douglas.

Computer tomographic scan (CT scan) examination revealed a fractured IUCD, which had migrated, presumably in the right fallopian tube with local adhesions including a part of the small bowel. Penetration of the small bowel could not be observed (Figure-1).

Considering the pain and the findings revealed by the

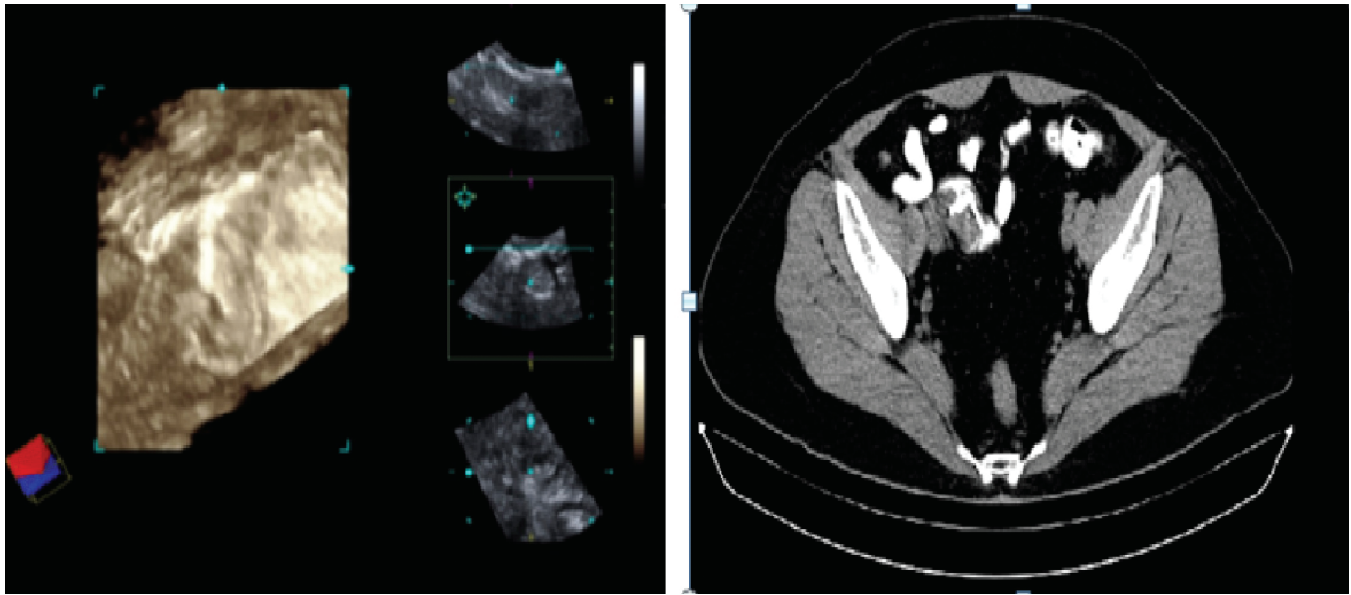


Figure-1: Ultrasound and computer tomographic scan.

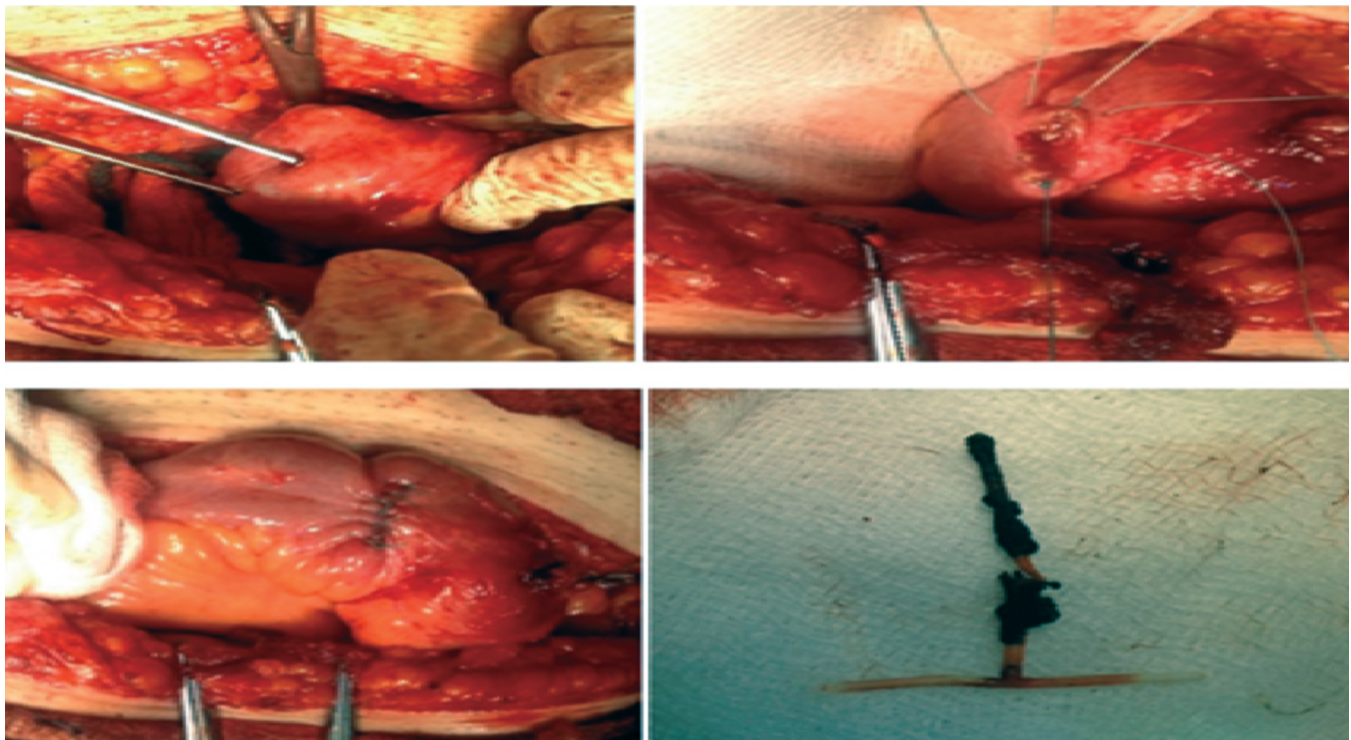


Figure-2: Intra-operative aspects.

imaging investigations, it was decided to perform an exploratory laparotomy. Intraoperative findings included a normal sized uterus, and right iliac fossa adhesions involving the caecum, small bowel, left fallopian tube and the posterior surface of the uterus. A band of fibrous tissue

of about 1.5-2 cm was observed between the right fallopian tube and the terminal ileum. After adhesiolysis, it was palpated to discover the presence of an IUCD inside the ileum. Ileal stoma was performed and two fragments of the Copper T located near the ileocecal valve were

extracted. The stoma was repaired in a single layer mucomucosal stitch (Figure-2). The bleeding caused by the adhesiolysis at the level of right adnexa caused us to perform total hysterectomy and bilateral adnexectomy. The patient did not receive any blood transfusion. She received analgesics, intravenous fluids and antibiotics. She was discharged on the seventh day in a stable condition with re-established intestinal transit and good oral intake.

Discussion

The first intrauterine modern device dates from 1909,³ but now they are considered a widely used birth control method with rare complications such as perforation, infection, and ectopic pregnancy.⁴ Risk factors for uterine perforation include patients with retroverted or retroflexed uterus and IUCD is inserted directly or passes into the abdominal cavity through an iatrogenic opening in the uterine wall.² The most commonly involved organs are cervix, broad ligament, ovary and uterine myoma, with the rectosigmoid colon and urinary system to the next commonly affected.

It has been demonstrated that devices as Lippes Loop and Saf-T-Coil cause little biological reaction and can be safe for long periods;^{5,6} early loop devices, such as the Birnberg bow were associated with small bowel strangulation. Closed copper coils induce marked peritoneal reaction, causing adhesion formation and bowel injury.⁷

Ultrasound scan is the most commonly used method to document the position of the IUCD within the uterus, but CT scan, pelvic X-ray, hysteroscopy, laparoscopy and colonoscopy are other diagnostic methods which can aid in the diagnosis. It is considered that CT scan imaging can precisely locate the migrating IUCD in the pelvic and abdominal cavity.⁸ The recommendations are that an IUCD located in the abdominal cavity should be removed even in asymptomatic patients because of the risk of adhesion damage to the surrounding structures.⁹

The median time interval for visceral complication was reported to be seventeen months (varying from four weeks to thirteen years).⁹ Medical literature mentions one case of a migrated IUCD which, after 31 years of insertion, had become embedded in the omentum, and each of the two "arms" of the coil had entered into the lumen of mid ileum, giving rise to a closed loop obstruction.⁹ Another

case report of an unusual complication of the IUCD is in which the device perforated the uterus and migrated to the ileum but the IUCD string was still visible per vaginum.¹⁰

Conclusion

The case described above is notable considering the long interval between insertion and presentation of the symptoms of complication. It cannot be established if the IUCD perforated the uterus at the time of insertion or after, and why there were no complications as a pregnancy occurred shortly after insertion. In our opinion, the IUCD had migrated early on.

Disclaimer: Informed and written consent was taken from the patient.

Conflict of Interest: None declared.

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