

# Retrieval of Lost IUCD from Sigmoid Colon by Colonoscopy: A Case Report

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### Abstract:

*IUCDs are easy to use and effective. It has somewhat greater failure rates than oral contraceptives but is otherwise safe. IUCD is used by 85 million women worldwide. A missing device may indicate unrecognised string expulsion or retraction into the cervix/uterus or IUCD perforation at an extra uterine region. Many problems are observed with IUCD. If IUCD perforates the uterine wall and enters the peritoneal cavity, consequences may be asymptomatic or severe.*

*We report a case of a lost IUCD found trapped in the sigmoid colon wall 4 years after insertion and presenting with chronic constipation in a 23-year-old woman. A CT scan of the*

*abdomen was performed to identify constipation and chronic backache. The IUCD was collected during colonoscopy after bowel preparation. The patient recovered without difficulties.*

*Due to its peculiar presentation, missing IUCD may not require extensive workup. In this rare case, the endoscopic method of retrieving IUCD saved the patient from a main laparotomy.*

**Key Word:** IUCD, Perforation of the uterus, Colonoscopy.

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### Background:

Flexible Intrauterine contraceptive device is one of the safest modes of long-term reversible methods of contraception and has been used since 1965<sup>1</sup>. Perforation of the uterus by IUCD is a potentially serious but uncommon complication. And it is said to occur during the course of insertion. The occurrence of perforation ranges from 0.4 to 1.6 per 1,000 insertions<sup>2</sup>. It could remain asymptomatic even years after insertion<sup>2</sup>. After perforation, it might lead to the migration of the device to surrounding organs intimately related to the uterus, like the bladder and the recto-sigmoid region.

The perforation of the uterus by IUCD during insertion is directly related to the experience and skill of the service provider<sup>3</sup> or due to chronic inflammatory reaction to the copper-containing foreign object, which causes gradual erosion of the uterine wall<sup>4</sup>.

### Case Presentation:

A 23-year-old married woman, para 1+1, from a lower-middle-class family, presented with a history of copper-T (IUCD) insertion 4 yr back by a family welfare assistant (FWA) in rural government Family Welfare Centre for contraception. Her menstrual pattern was regular, and her flow duration was average. She went to the facility on day five of her period. She states that the insertion was difficult and felt moderate to severe lower abdominal pain. During the immediate post-insertion period, the pain persisted for 1 to 2 days, relieved by antibiotics. She had no history of per-vaginal bleeding immediately after insertion. She had her one normal menstrual period after insertion. She missed her due period two months after insertion and consulted with the same family welfare assistant to determine the cause. She examined her with a speculum and found no CU-T thread out of the cervix. Then a pregnancy strip test was done, and the result was positive.

The patient was not willing to continue the pregnancy. MVA (manual vacuum aspiration) was done for

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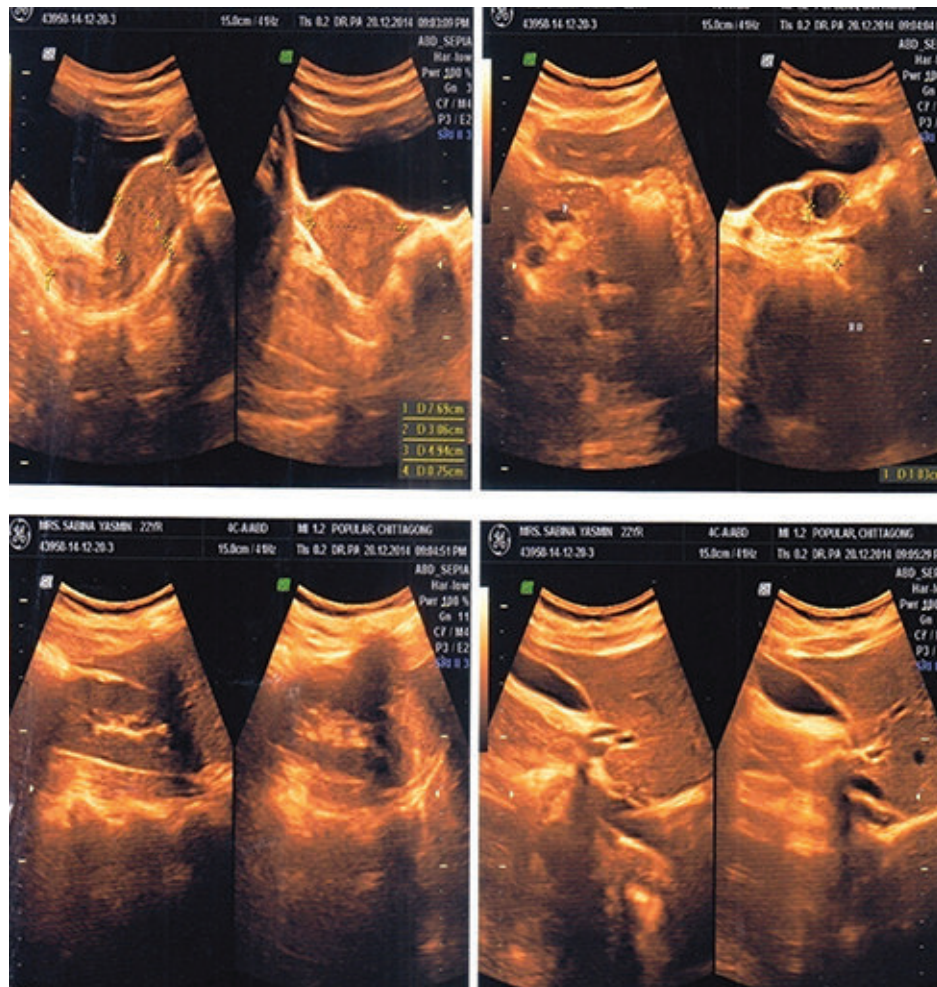
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menstrual regulation on the same day by the same family welfare assistant at the same facility. IUCD was not found or felt in the uterine cavity during the procedure. FWA (Family welfare assistant) consoled the couple and said CU-T might have fallen after insertion. To ensure ultrasonography was done during post-abortion care to confirm her statement, IUCD was not seen within the uterine cavity. For the last 2 years, she has suffered from constant backache and pain during defecation, with a gradual increase in severity and intensity. That compelled her to seek medical help in a tertiary care centre. Before coming here, she consulted with many healthcare providers for chronic constipation. She was on the barrier method of contraception for the last four years. While examining her per abdominally, tenderness

was elicited in the lower abdomen on deep palpation, but no rebound tenderness. Per vaginal examination reveals, tenderness in the posterior fornix. Digital rectal examination was mildly tender.

#### Investigations:

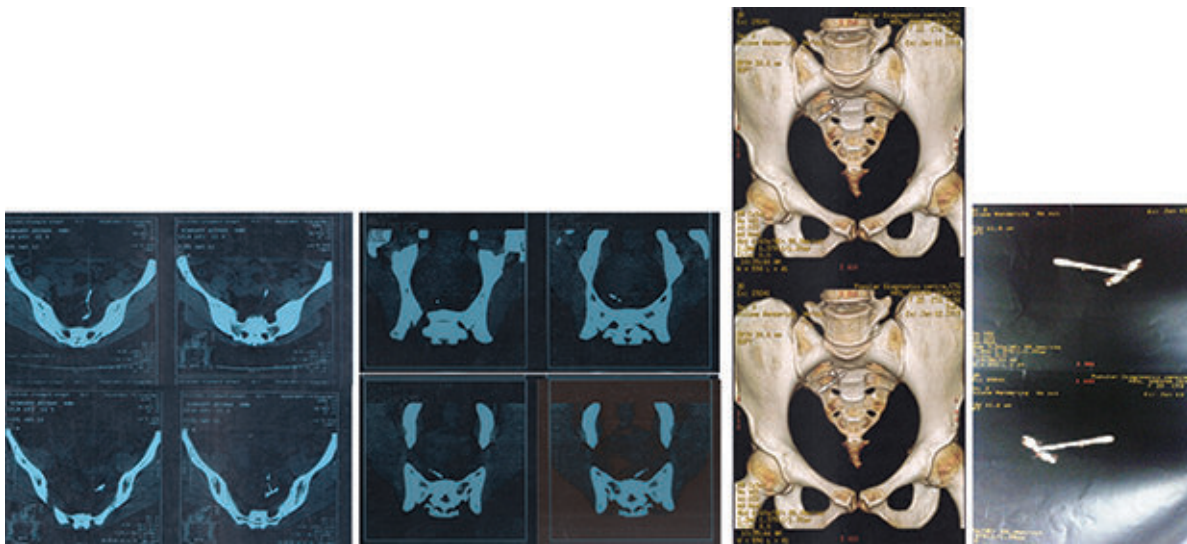
USG pelvis couldn't reveal the device in the uterine cavity or myometrium. But the colon was loaded, and the pelvis had minimal free fluid. Pelvic X-ray reveals IUCD lying outside the uterus but within the pelvic cavity, which was the first line of investigation. For confirmation of the location of IUCD CT scan of the abdomen was done and revealed that IUCD was partly in the recto-sigmoid and partly in the pelvis. Hb%, total leukocyte counts were within a normal range.



**Fig.-1:** Ultrasonography of Lower Abdomen



**Fig.-2:** X ray Pelvis (AP view)

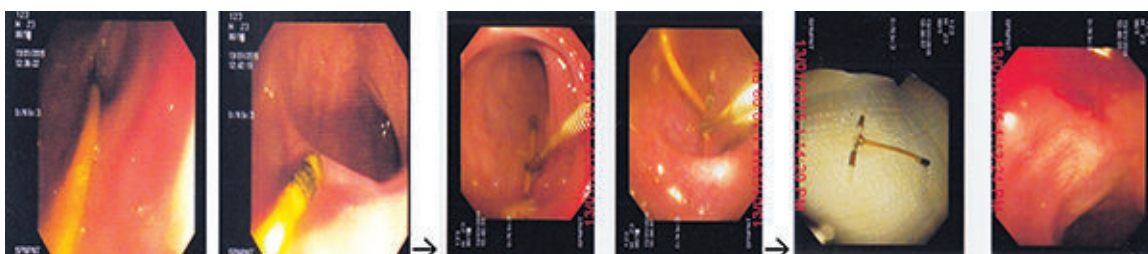


**Fig.-3:** CT scan findings Showing IUCD in the Pelvis (displaced Site)

#### **Treatment:**

After consultation with the surgeon, endoscopist, and gynaecologist decision of colonoscopic retrieval of lost IUCD from the sigmoid colon was taken, keeping the patient prepared for laparotomy if colonoscopic retrieval failed. For that patient was admitted. Prophylactically, she was started on an injection of ceftriaxone and metronidazole. Necessary consent was obtained for colonoscopy and possible laparotomy. Under sedation, a colonoscopy was performed. Sedation was given with

an injection of pethidine, as the device could be extracted. Using biopsy forceps, the “T” end of the device was pulled into the recto-sigmoid. The forceps were replaced with a snare, and one limb of the “T” was secured, and the device extracted through the anal opening. The recto-sigmoid area was inspected, and no bleeding was found. During the post-procedure period, the patient’s vitals were all right; her abdomen was soft and had no tenderness. After ensuring her condition was fine, she was transferred to the ward for



**Fig.-4:** Endoscopic removal of IUCD from Sigmoid-colon.

observation. The patient was kept nil per oral for 24 hours, started on fluids, and took a normal diet after 48 hours post-procedure. Antibiotics were continued for 3 days until the patient could tolerate oral intake and pass stool without any complaints. She was discharged on oral cefuroxime for five more days.

#### **Outcome and follow-up:**

The patient was followed up after 1 week and found that her lower abdominal pain had subsided and she had no more painful defecation. The patient followed up six weeks after the procedure and was all right, and her complaints reduced significantly.

#### **Discussion:**

The most common complications of IUCD are bleeding, infection, ectopic pregnancy, and uterine perforation. Important factors responsible for uterine perforation are consistency and flexion of the uterus, type and rigidity of the IUDs, expertise of inserters, and amount of force exerted at insertions which might cause the IUDs to stop at certain points rather than proceeding to complete perforation [5]. A majority of the perforations occur during the time of insertion. The delayed onset of symptoms usually means the migration of the device. The timing of IUCD insertion and the rate of perforation is flexible. But it was seen that uterine perforation was ten times higher in women lactating at the time of IUD insertion [6]. In this case, the possible mechanism of IUCD migration is a gradual erosion of the uterine wall due to chronic inflammation.

There is always a chance of IUCD migration, which should be alerted to every patient wearing it. Regular self-examination for missing threads is useful in the early detection of migration. If there is a missing IUCD, a plain radiograph (X-Ray) of the abdomen and pelvis is taken to rule out unnoticed expulsion of the IUCD. Or USG could be done to see the location of IUCD in situ.

CT scan is recommended to determine the exact location of the IUCD.

Treatment of migrated IUCD is mostly surgical, either laparoscopy or laparotomy. [7] In partial migration of the device, when the patient is asymptomatic, the recommendation is to withdraw it. Removal of IUCD during the state of partial migration prevents future development of bowel perforation, bladder perforation, and fistula formation.

There are few reports where the migration has been into the recto-sigmoid and the pelvis where the extraction of the device has been done manually per rectum and also using a sigmoidoscope or colonoscope [8]. In our case, the patients did not develop peritonitis after removal. Due to the prolonged longing of IUCD in the recto-sigmoid, a pericolic abscess might be developed, which could have prevented the development of stool leak in the peritoneal cavity and subsequent peritonitis development [9].

#### **Conclusion:**

IUCD insertion for contraception might cause devastating complications like perforation. Most of the perforation occurs during insertion. Perforation might be asymptomatic for years and can be an incidental finding or diagnosed during low back pain evaluation. Patient needs to follow up on the thread of IUD regularly and should report if there is a missing thread. Treatment of partial migration at the gut is mostly surgical. But a trial of endoscopic removal might save the patient from a messy surgery that involves the gut.

#### **References:**

1. Sivini IB. State-of-the-art on non-hormonal methods of contraception: III. Intrauterine devices. *Eur J Contracept Reprod Health Care.* 2010; 15:96–112.
2. Harrison-Woolrych M, Ashton J, Coulter D. Uterine perforation on intrauterine device insertion: is the incidence

- higher than previously reported? *Contraception*. 2003; 67:53–56.
3. Ratnam SS, Tow SH. Translocation of the loop. In: Zatzuchni GI, editor. *Post-partum Family Planning: A Report on the International Program*. New York, NY: McGraw-Hill; 1970. pp. 371–384.
  4. Esposito JM, Zarou DM, Zarou GS. A Dalkon shield embedded in a myoma: a case report of an unusual displacement of an intrauterine device. *Am J Obstet Gynecol*. 1973; 117:578–581.
  5. Zakin D, Stern WZ, Rosenblatt R. Complete and partial uterine perforation and embedding following insertion of intrauterine devices. *Obstet Gynaecol Surg*. 1981; 36: 335–53.
  6. Heartwell SF, Schlesselman S. Risk of uterine perforation among users of intrauterine devices. *Obstet Gynecol*. 1983;61:31–6.
  7. Richardson ML, Kinard RE, Watters DH. Location of intrauterine devices: evaluation by computed tomography. *Radiology*. 1982;142:690.
  8. Assarian A, Raja MA. Colonoscopic retrieval of a lost intrauterine contraceptive device: A case report and review of articles. *Eur J Contracept Reprod Health Care*. 2005;10:261–5.
  9. Darlong, L. M., Panda, S., Topno, N., & Hajong, R. Colonoscopic retrieval of migrated copper-T. *Journal of minimal access surgery*. 2009, 5(2), 40–42. <https://doi.org/10.4103/0972-9941.55107>