



laparoscopic management of a misplaced intra uterine device in sigmoid mesentery.

KEYWORDS

intrauterine device, contraception, migration, laparoscopy

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ABSTRACT

Intrauterine contraceptive device (IUCD) migration subsequent to uterine wall perforation is an uncommon but serious complication. We, here by, reporting a case of misplaced IUCD inserted 6 week postpartum in a post LSCS patient, followed by its successful and prompt laparoscopic management.

Introduction:

In India 2% married women of reproductive age group usage IUCD as a method of contraception.¹

Uterine perforation during insertion is a rare complication which occurs in 0.5 - 1.5 per 1000 insertions and is associated with the level of provider's skill and experience (Trieman et al 1995).

Most perforations are silent in 85% cases, and may go undetected (Penny et al 2004)¹ only in 15% cases symptoms are present. Removal of IUD may be done by hysteroscopy, laparoscopy or laparotomy.

Case report:

26-year-old Para 2 Live issue 2 with 2 previous caesarean section, 6 weeks postpartum was brought to emergency department with complain of pain in lower abdomen. She complained of diffuse agonizing abdominal pain, non radiating, non localized to any iliac fossa. Patient didn't have any history of vaginal bleeding, diarrhea, hematuria, rectal bleeding. Patient had copper 375 inserted at tertiary care hospital 6 weeks post LSCS. Clinical examination revealed stable vital parameters and a soft abdomen.

Bowel sounds were present. On speculum examination copper -375 threads could not be seen. No tenderness was elicited on vaginal examination. Radiography with intrauterine sound showed IUD in left adnexa. Ultrasonography of the abdomen and pelvis showed IUD partially embedded in left ovary in left adnexa, outside the uterus. No air or free fluid was seen in the peritoneal cavity.

In view of vitally stable patient laparoscopy, on emergency bases, was attempted on same day after pre-op investigations and evaluation. On laparoscopy following findings were seen: 1 x 1cm size uterine perforation was seen on fundus. Copper-T threads were seen in pouch of Douglas on left side. copper T was traced with the help of threads, which was found embedded in mesentery of sigmoid colon. Copper T was removed via 5 mm port site. Bowel and mesentery were inspected. No bowel injury was seen. Bowel intactness was checked by hydrofloation of bowel, no perforation found. Uterine perforation was left untouched as it was non bleeding. a thin band of flimsy adhesion found between uterus and anterior abdominal wall, which was separated. Post procedure period was uneventful. Bowel sounds were present 2 hours post procedure. Liquids started from next day. patient was kept under observation and discharged on the 7th postoperative day.

Discussion:

Uterine perforation by an IUCD is reported as a complication in 0.87 per 1000 cases, varying from 0.05 to 13 per 1000 insertions.²

The risk of perforation is maximum at the time of IUCD insertion. The IUCD usually gets embedded in the uterine wall and is later forced through the uterine wall by uterine contractions into the abdominal cavity and other organs.³

Sharp pain at the time of insertion, disappearance of IUD thread and post procedure bleeding are suggestive of perforation.

Two types of uterine perforation can occur, ie, complete and partial. If the IUCD perforates through all uterine layers (endometrium, myometrium, and serosa) is called a complete perforation. Less commonly, the IUCD penetrates the myometrium but still remains in the uterus, which is known as partial perforation.

The IUCD thread may not be felt due to thread retraction, expulsion, or perforation. Uterine perforation by an IUCD is asymptomatic and does not affect the adjacent organs in 85% of cases, but in the remaining cases, it can invade the adnexa, broad ligament, pouch of Douglas, urinary bladder, rectum, sigmoid colon, and intestine.^{4,5,7}

An IUCD present in the peritoneal cavity can cause bowel obstruction, perforation, abscess, and fistula formation. Bowel injury usually presents as a triad of abdominal pain, fever, and intermittent diarrhea. Perforation of the rectum or sigmoid colon by an IUCD can lead to complications like peritonitis and stricture. The duration between insertion and appearance of symptoms of perforation has been reported to vary from six months to 16 years.^{5,7}

Perforation by a copper-containing device is associated with increased risk. This is because a severe inflammatory reaction ensues, due to release of cytokines, and degradation of the extracellular matrix, caused by matrix metalloproteinase⁶

Risk of uterine perforation by an IUCD has been attributed to various causes, including operator inexperience, an extremely retroverted or retroflexed uterus, and insertion during the puerperium and lactation.

The possible etiology of the misplaced IUCD in this case could have been faulty insertion of the IUCD, whereby it might have been forced through the fundus because the thinned out uterus in lactational amenorrhea and hypo estrogenic state.

Cases of a missing IUCD should be thoroughly investigated, with X ray with uterine sound and USG. CT scan is indicated when there is discrepancy between ultrasound and radiograph or when bowel involvement is suspected.

An intraperitoneal copper-containing IUCD should be removed,

even in asymptomatic cases.

The treatment of the misplaced IUCD is with uterine sounding, surgical laparoscopy, hysteroscopy or laparotomy.

Laparoscopy, being less invasive and safer, is nowadays the treatment of choice. Partially perforating or embedded devices could be removed by minimally invasive hysteroscopy, a procedure significantly easier for both the patient and the physician.

In a study of Gill R, Laparoscopic removal of perforated IUDs was achieved successfully in 64.2% (115/179) of cases, the presence of adhesions and perforation of viscera often resulted in the need for a laparotomy to remove the IUD.¹⁰

Withdrawal of the migrated IUD is advisable even if its migration is asymptomatic, so that further complications like a bowel and bladder perforation or a fistula formation may be prevented⁸

Conclusion:

Patient presented with lower abdominal pain and the IUCD was found embedded in the sigmoid serosa.

During puerperium, as uterus is very small, insertion technique plays a vital role for prevention of complications.

It is imperative to stress to the woman the importance of feeling the IUCD thread intermittently after periods and attending for a routine follow-up after IUCD insertion at one month, three months, and yearly thereafter.

Patient education and post insertion counselling pertaining to symptoms, arising due to complications of iucd, will let the patient to seek medical help earlier .so that early intervention can prevent serious injury to adjacent organs.

Laprosopy is associated with comfort, minimal hospital stay and early recovery and hence it is recommended as the preferred method for removal of extra uterine misplaced IUD.

Figures

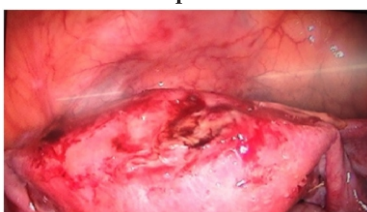
Fig. No :1 IUCD threads in POD on laparoscopy



Fig. No : 2 locating IUCD in sigmoid mesentry by tracing the threads



Fig. No :3 small uterine fundal perforation



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