

## Case Report

# Asymptomatic IUD Migration into the Small Bowel: A Case Report and Review of Literature

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## Abstract

As more IUDs are being placed perforations will become more common. The management of IUD perforation and migration is immediate removal once identified, unless the surgical risks are too great. We present a 52 year old with a copper IUD placed 12 years earlier, who was incidentally found to have IUD migration into the lumen of the small bowel. To prevent these rare but serious complications, a finding of an intra-abdominal IUD device requires surgical management unless procedure risk is excessive.

## Keywords

- Contraception
- IUD Migration
- IUD Complications
- Small bowel perforation

## ABBREVIATIONS

IUD: Intrauterine Device

## INTRODUCTION

There has been a steady increase in the insertion of intrauterine devices from 2002 to 2008 from 1.6/1000 to 9.8/1000 women in the United States annually [1]. The first prospective trial looking specifically at the IUD perforation rate from 2006-2012 showed interim results of 0.68 perforations per 1000 insertions [2]. Though the incidence of perforations appears steady, the frequency of perforations has increased as more IUDs are placed. We report a patient with IUD migration into the intestinal lumen.

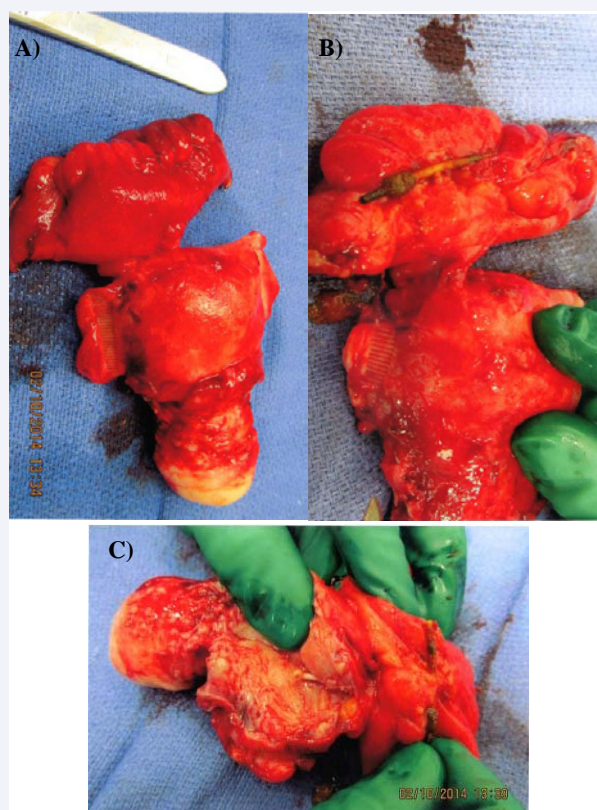
## CASE PRESENTATION

A 52 year old G1P1 patient with a copper IUD placed 12 years earlier was referred for new onset pelvic pressure and increasing abdominal girth, with a scan demonstrating a 12x14x16 cm separated mass within the pelvis and CA-125 level of 253. The scan reported the presence of an IUD, but did not comment on the exact location. At the time of surgery, a portion of small bowel was densely adherent to the uterine fundus. Palpation of the segment of bowel revealed a hard, T-shaped foreign body within the small bowel lumen. Due to the dense adhesions and unfavorable positioning of the IUD, a 10 cm segment of bowel was resected en bloc along with the uterus, ovaries, and the ovarian mass. The bowel was repaired with a side-to-side functional anastomosis using staples. The IUD had migrated in a way that the arms of the device were within the bowel lumen while the body of the IUD was still within the uterus. The patient had an uneventful post-operative course and underwent chemotherapy for stage IIB high grade ovarian serous carcinoma.

## DISCUSSION

There are few reported cases of bowel injury with IUD perforation or migration. In the case presented above, it is unknown if the device perforated during placement or migrated years later. The pelvic mass, which was found to be ovarian serous carcinoma, was thought to be unrelated to the perforation of the IUD through the uterine fundus. The IUD migration was an incidental finding during the surgery. Additionally, the elevated CA-125 is not likely affected by IUD perforation; however representative of the ovarian neoplasm is found in this case report.

Risk factors for perforation at time of insertion include pain, an immobile or retroverted uterus, presence of myometrial defect or clinician inexperience [3]. Our patient was asymptomatic and had none of these risk factors. A review in 2012 examined 179 cases of intra-abdominal intrauterine devices that were attempted to be removed laparoscopically. The location of the migrated IUDs were found in a variety of locations, including 10.6% (19/179) that involved small bowel or colonic perforation secondary to the IUD [4]. Another review in 2014 showed 23 cases of colonic penetration over the past 30 years [5]. Some cases in the literature support leaving the IUD in place in certain circumstances. In asymptomatic patients, it can be argued that excessive surgical risk in removal of non-copper open type IUDs [6] and the risk of laparotomy outweigh the benefit of removal [7,8]. However, other authors and organizations recommend immediate removal of any IUD diagnosed to be intra-abdominal citing risks of adhesion formation and injuries to adjacent organs by the IUD [9-11]. Our case appears to add to these numbers, and gives further evidence that an IUD has a risk of migration and injury to the small bowel. At time of removal it is precedent



**Figure 1** (A) –A portion of small bowel adherent to the fundus of uterus. (B) An IUD perforating into the small bowel, demonstrated by the two arms of the IUD within the lumen after dissection. (C) The base of the IUD is found to be contained within the endometrial cavity after dissection.

to have general surgery capabilities in the event of intestinal involvement.

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