

THE WANDERING INTRA UTERINE DEVICE: A RARE CASE REPORT

General Surgery

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ABSTRACT

Intra Uterine Device (IUD) is one of the widely used reversible methods of female contraception. There are many complications reported with IUD insertion, among which device migration and delayed perforation of viscera like small bowel is one of the rare and serious complication. Here we report a case of 29 year old female who presented with sudden onset of abdominal pain associated with vomiting. Her Computed Tomography (CT) scan of abdomen revealed IUD lying within peritoneal cavity causing terminal ileal perforation. She was treated surgically and she recovered well. Extra uterine visceral organ injury many months or years following IUD insertion is rare and should be considered as a differential in any female with IUD presenting with abdominal symptoms.

KEYWORDS

Migrating IUD, IUD perforation, visceral perforation by IUD, Wandering IUD, Misplaced IUD

INTRODUCTION

The use of IUD as a contraception was first introduced in 1909 by Richter [1]. It was later modified by Grafenberg in 1929 [2]. There are 2 varieties of IUD used presently – copper releasing IUD and levonorgestrel releasing IUD [3]. The first case of uterine perforation following IUD insertion was reported in 1930 [4]. The rate of uterine perforation following copper releasing and levonorgestrel releasing IUD insertion was found to be 0.3 – 2.6 and 0.3 – 2.2 per 1000 users respectively [5]. Uterine perforations following IUD insertions can occur immediately due to faulty insertion or years later due to device migration caused by uterine contractions [6]. The uterine perforation is either complete with device being totally within the peritoneal cavity or partial when some part of device still lies within uterine wall. World Health Organization (WHO) recommends that all the migrated IU following uterine perforations should be surgically removed as early as possible [7]. However, there has been another school of thought who suggests that the migrated IUD, if asymptomatic, can be left in situ and managed conservatively [8].

Case report

A 29 year old female presented with complaints of lower abdominal pain and vomiting of 1 day. There was no history of loose stools or urinary symptoms. She gives history of copper T insertion 4 months after her last child birth 4 years ago. 2 months post insertion she developed amenorrhoea for which she was evaluated and diagnosed with complete spontaneous abortion. During the follow up, x ray of abdomen at the time showed misplaced copper T and was advised surgical removal which she did not undergo. She was asymptomatic until now except for irregular periods. On evaluation, she was found to be hemodynamically stable with tenderness and guarding in the lower abdomen. CT scan of abdomen revealed IUD within peritoneal cavity with sealed off perforation probably involving terminal ileum.

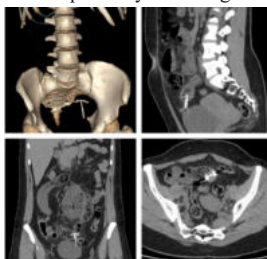


Figure 1: CT images showing migrated IUD within the pelvis seen penetrating the inferior wall of terminal ileal loop with its vertical limb within the lumen. The inferior limb of IUD is seen indenting on the dome of urinary bladder. Features of small bowel obstruction with pneumatosis, small bowel feces sign and dilated small bowel loops are seen.

She was taken up for diagnostic laparoscopy. At surgery, a conglomerate mass involving sigmoid colon, bladder and terminal ileum was found. Careful dissection was done to avoid inadvertent injury. IUD was removed successfully from within the terminal ileum, 20 centimeters proximal to ileocecal junction.

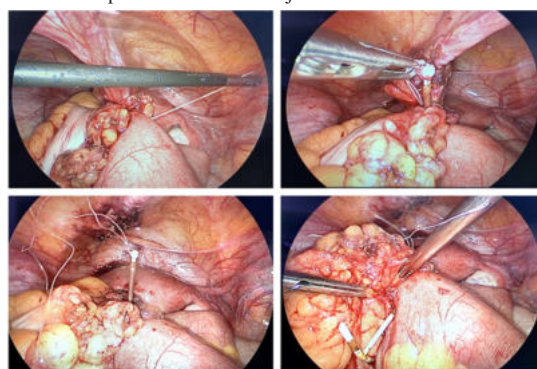


Figure 2: Laparoscopy showing a mass involving bladder, sigmoid colon and terminal ileum and retrieval of IUD.

The involved ileal loop was exteriorized through a small incision and the site of perforation was excised and sent for histopathology and defect was primarily closed. Patient recovered well in post operative period and was discharged on third post operative day.

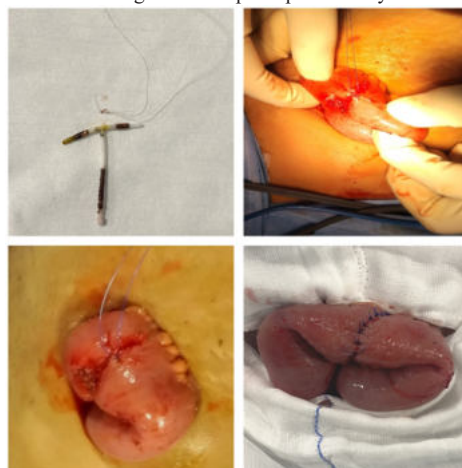


Figure 3: Retrieved copper T and closure of perforated ileum.

DISCUSSION

One of the serious and rare complications of IUD insertion includes perforation of uterus and migration into the peritoneal cavity [9]. The rate of uterine perforation following IUD insertion is less than 1 in 1000 insertions as per the Faculty of Family Planning and Reproductive Health Care (FFPRHC) Clinical Effectiveness Unit [10]. The most common organ reported to be involved following uterine perforation and IUD migration is rectum [11]. However, there have been cases reported where IUD gets lodged into small intestine, sigmoid or urinary bladder [12, 13, 14]. The copper from copper releasing IUD causes abdominal pain, omental adhesions and bowel perforations [15]. The triad of abdominal pain, fever and intermittent diarrhea is seen in bowel perforation [16]. Most of the time it is an incidental finding where the patient is asymptomatic [17]. Uterine perforation can even occur after decades following IUD placement [18]. The treatment of migrated IUD is based on its location, presenting complaints and organs involved. Asymptomatic patients without evidence of visceral organ injuries can be followed up [8]. The removal of migrated IUD can be carried out by minimally invasive techniques [19]. The surgical management in case of IUD migration associated with visceral organ injuries can be done through laparoscopic or hysteroscopic approach [20].

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