

## Case Report

# Asymptomatic missing Intrauterine Contra-ceptive Device found incidentally at Laparotomy

Ganiyu Adebisi Rahman, Ibrahim Funsho Yusuf

Division of General Surgery, Department of Surgery, University of Ilorin Teaching Hospital, Ilorin, Nigeria.

### Abstract

The aim of this presentation is to report an asymptomatic missing intrauterine contraceptive (IUD) found in the omentum at surgery for cholecystectomy. Patient presented with clinical features of chronic calculus cholecystitis. Missing IUD was found at exploratory laparotomy for cholecystectomy. Excision of omentum was done and the patient did well. IUD providers should not only screen potential users and insert IUD correctly, but also ensure adequate follow-up.

### Introduction

Intrauterine Contraceptive Device (IUD) is an acceptable and common form of contraception worldwide. The percentages of married women of reproductive age using IUD have ranged between 5-40%, excluding China.<sup>1</sup> Complications associated with its use include missing or misplaced IUD. The proportion of missing IUDs has been less than 1%.<sup>2,3</sup>

Missing IUDs can be in the form of missing strings, spontaneous expulsion and perforation of the uterus (Frank or occult). The IUD may migrate into the peritoneal cavity. Gut and bladder perforations have been reported following uterine perforations due to missing IUDs.<sup>1,3</sup>

There are different diagnostic methods used in detecting missing IUDs. These include: pelvic examination with uterine sound, abdomino-pelvic ultrasound alone, abdomino-pelvic ultrasound complimented with hysterosalpingography (HSG), plain abdominal X-rays, HSG, laparoscopy, minilaparotomy and laparotomy. These are however, in patients who report to their Gynaecologist. Most patients with missing IUDs were reported less than 6 user months especially within the first three months of IUD insertion.<sup>2,3</sup>

We report in this communication an asymptomatic patient who had a missing IUD but did not report in hospital. The IUD was found in the greater omentum at laparotomy for cholecystectomy.

### Case Report

Mrs. F. E. a 55 year old civil servant presented in the Surgical Outpatient Department (SOPD) with a 10 year

history of right hypochondrial and epigastric pain. The pain was colicky, intermittent and associated with vomiting. She had not experienced haematemesis or maelena and denied any history of jaundice, generalized pruritus or weight loss. The right hypochondrial pain sometimes responded to antispasmodic drugs bought over the counter. There was also occasional response to antacids and oral cimetidine. There was no significant change in bowel habit. She was para 7+1, 7 alive. Last confinement was 18 years before presentation and she was 2 years menopausal.

Examination revealed a patient with no pallor, was afebrile and anicteric. The only finding on abdominal examination was mild tenderness in the right hypochondrium. All other systems were normal. A diagnosis of chronic cholecystitis was made. The abdominal ultrasound

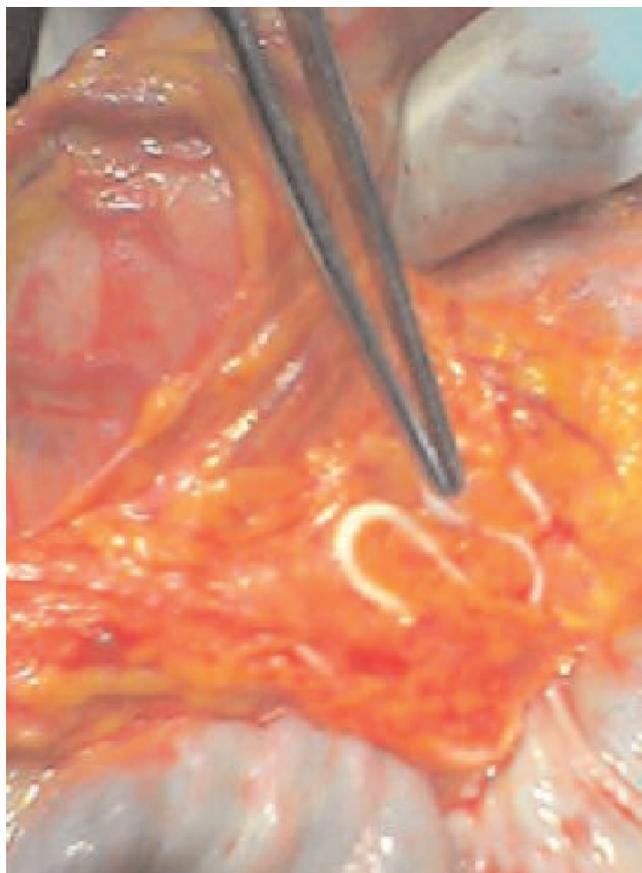


Figure: Loop IUD seen in the greater Omentum.

showed a normal sized liver with a uniform echotexture. The intrahepatic bile ducts were within normal limits. The common bile ducts was about 6.0mm in diameter. The gallbladder wall was thickened with multiple mobile echogenic structures of varying sizes and shapes suggestive of gallstones. The complete blood counts, serum electrolyte, urea and creatinine, chest x-ray and Electrocardiogram (ECG) were essentially normal. The haemoglobin genotype was AA. She was prepared and planned for cholecystectomy. At surgery the gallbladder was distended with multiple stones (Total 141). The lower oesophagus, stomach and the bowels were also normal. The uterus and its adnexae were essentially normal. An incidental finding at surgery was a loop IUD in the greater omentum (Figure). The patient had cholecystectomy and excision of the greater omentum with the loop. The post-operative period was uneventful. The histopathology report showed chronic cholecystitis with markedly thickened gallbladder wall.

## Discussion

Intrauterine Contraceptive Device (IUD) is a widely accepted method of contraception. Percentage of married women of reproductive age using IUDs have ranged between 5-40% worldwide, excluding China.<sup>1</sup>

The prevalence rates of missing IUDs in most studies vary between 0.5-2% of IUD users.<sup>3</sup> The proportion of missing IUDs was 0.25% of all IUD users or 0.89% of new acceptors in a recent study.<sup>2</sup> Missing IUDs may be detected when IUD string cannot be found in the vagina near the cervix. This may be as a result of expulsion or perforation of the uterus (frank or occult), but sometimes it may be as a result of migration into the peritoneal cavity. In this case presented, since the patient was asymptomatic, it is likely to be as a result of migration.

As reported in previous studies, it is important to realize that IUDs do not perforate the uterus on their own, they do so at insertion.<sup>4</sup>

In the literature there have been reported cases of intraperitoneal IUDs presenting with abdominal pain, pregnancies, uterine perforation with associated intra-abdominal abscesses, vesical stones, appendicitis and in fact, ureteric obstruction leading to nephrectomy.<sup>5-7</sup> However, it rare to find it in the greater omentum as this case presented.

There are different ways of detecting intra-peritoneal IUDs such as the use of abdominal ultrasound, transvaginal sonography, plain abdominal x-rays and laparoscopy.

Sonogram is not reliable if the IUD is surrounded by the omentum or loops of bowel.<sup>8</sup> In the presented case ultrasound used for identifying the gallstones did not show the IUD in the greater omentum.

The most serious complication of IUD use is uterine perforation and this can cause severe morbidity. The generally accepted indications for removal of intra-abdominal intra-uterine device are: a closed variety of IUD, medicated IUD with copper hormone release and medico-legal or psychological problems. It has been suggested that a perforated IUD can be left in peritoneal cavity if it is made of non-irritating plastic.<sup>9</sup> It has also been advised that all extra-uterine devices should be removed to discourage psychosomatic symptomatology commonly associated with forgotten devices.<sup>10</sup>

To prevent uterine perforation, the insertion should be by a meticulous and well executed technique performed by an experienced operator after a careful pelvic examination. Uterine size, consistency and position must be exactly known.<sup>8</sup>

To avoid such a complication, it is advisable that failure to locate the IUD string in a patient who has not noticed expulsion, should be interpreted as an indication for perforation until proved otherwise. There should therefore be an effort to search for the missing IUD, which should include abdomino-pelvic ultrasound, transvaginal ultrasound and if inconclusive an abdominal x-ray (Posterior-anterior and lateral view).

In conclusion, IUD providers must screen potential users, insert the IUD correctly and ensure follow-up of the users.

## References

1. Centre for Disease Control. Intrauterine Contraceptive Devices - In Family Planning Methods and Practices in Africa. 3rd edition. CDC Atlanta, Georgia 1983.
2. Jimoh AAG, Balogun OR. Missing IUD Strings: Diagnosis and Management at Ilorin. *Nig. Journal Med.* 2004; 13: 118-23.
3. Lawal SO, Giwa-Osagie OF, Ogedengbe OK, Usifor CA. A review of IUCD related problems in Lagos University Teaching Hospital (LUTH). *West Afr J Med.* 1993; 12: 144-7.
4. Soderstrom RM. Trailing and treating the wandering IUD. *Am J Gynecol Health.* 1989; 3(3-S):33-4.
5. Rafique M. Vesical calculus: a complication of intravesical migration of intrauterine contraceptive device. *Int Urogynecol J Pelvic Floor Dysfunct* 2002; 13:380-2.
6. Serra I. Appendicitis caused by an intrauterine contraceptive device *Br J Surg* 1986; 73:927-8.
7. Timonen H, Kurppa K IUD perforation leading to obstructive nephropathy necessitating nephrectomy: a rare complication. *Adv Contracep* 1987; 3:71-5.
8. Zakin D, Stern WZ, Rosenblatt R. Complete and partial uterine perforation and embedding following insertion of intrauterine devices. II. Diagnostic methods, prevention, and management. *Obstet Gynecol Surv* 1987; 36: 401-17.