

A Perforated Intrauterine Device and Laparoscopic Removal from the Omentum: Case Report

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Abstract

Case Report

The intrauterine device (IUD) was a very common form of birth control in Tunisia and the world wide. The most serious potential complication of IUD use is uterine perforation. Clinical trials of Multiload Cu375 have reported an incidence of less than one uterine perforation per 1,000 insertions [1-3]. The recommended treatment is removal of the perforating IUD. This can usually be managed laparoscopically unless bowel perforation or other severe sepsis is present. We report a case of 45 years old woman carrying an IUD for 6 years which was referred from the family planning for IUD "lost". Upon vaginal examination, no IUD string was detected. An abdominal X-ray localised the IUD in a right iliac fossa. The device was identified and removed with a portion of the omentum. There is not an intestinal damage fortunately. The laparoscopic approach for intrauterine device removal has multiple purposes like identifying IUD, removing it and looking for eventually intestinal damages. It may be a simple and safe approach, thus minimizing possible postoperative complications.

Keywords: Intrauterine device, Perforation, Laparoscopy, omentum.

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INTRODUCTION

Since the introduction of the intrauterine device (IUD) by Richter in 1909, it has undergone many design modifications to increase its effectiveness and safety. Women who choose to use an IUD for contraception are potentially at risk for adverse events [6]. Complications accompanying IUD insertion are uncommon, but may include expulsion, retraction into the cervix or uterus, bleeding, infection, ectopic pregnancy, and perforation through the uterine wall and into the abdominal cavity or neighboring organs. Laparoscopic removal of a migrated IUD in the omentum is possible.

CASE REPORT

A 45-year-old gravida 4 para 3 abortus 1 woman underwent, for the first time in her life, intrauterine device (IUD) inserted 6 years ago. The device used was a copper T (375). The insertion was uneventful. She wants to remove it in family planning. She was asymptomatic. She was referred then to our department because they couldn't detect the IUD string. We performed an ultrasound echography showing an empty uterus. We completed by an abdominal X-ray which localised the IUD in a right iliac fossa. We decided than to perform an exploratory laparoscopy to identify the localisation of IUD (Fig 1 & 2) and to remove it if it was possible. The IUD was in the omentum. There was not an intestinal damages we removed it with a portion of omentum (Fig 3) because it was very attached to it. There was no evidence of intestinal damage. She was discharged a day after her laparoscopic surgery.

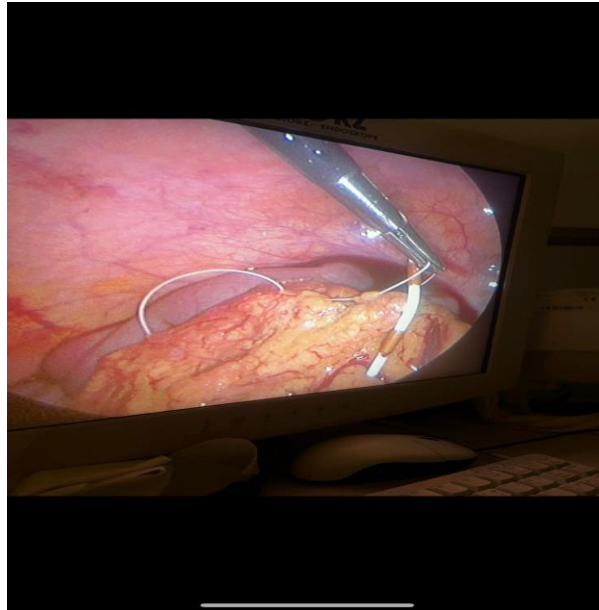


Fig 1: Laparoscopic surgery: Tentative to remove the IUD



Fig 2: Localisation of perforated IUD

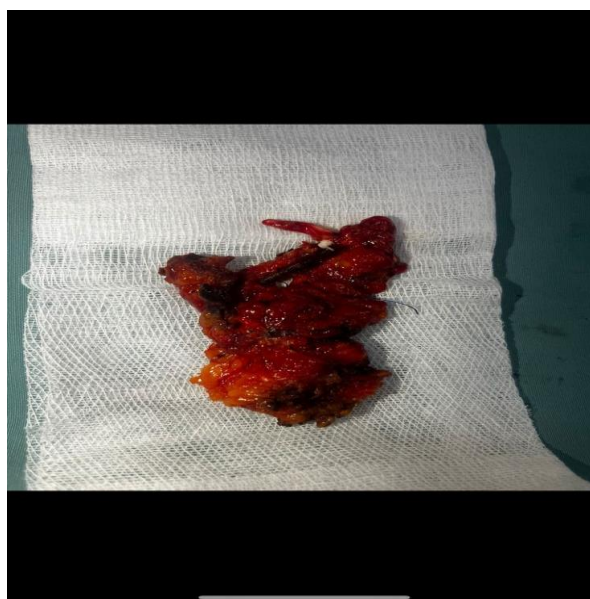


Fig 3: Removed IUD with a portion of omentum

DISCUSSION

Uterine perforation is an uncommonly reported complication of IUD use [1]. When IUD types have been compared, no significant difference was found between rates of perforation. The general incidence of perforation for all types has been estimated at 1.2/1000 [2]. Uterine perforation most often is symptomless and is first suspected when the woman presents with unintended pregnancy or for removal of the IUD, and the strings cannot be located [3]. It is speculated that most perforations occur at the time of insertion, although some have proposed that perforations can arise secondarily as well [4]. Most investigators believe, however, that the perforation must at least start at insertion [5].

Most perforations, fortunately, are uncomplicated [7]. However, adjacent organs may become involved. Very often in the past, a missing IUD string was simply diagnosed as an unnoticed expulsion, and no further follow-up was done [6, 7]. Every case of missing IUD strings should be carefully followed up to exclude perforation as the cause, and the diagnosis of expulsion should never be made unless the physician has physical evidence that the IUD is no longer present in the body. If this had been standard practice, some severe complications may have been prevented [8].

In our case, greater than 6 years elapsed from the time the patient inserted the IUD. A long duration of time between evidence of perforation and development of significant symptoms is not uncommon [8]. Because IUDs can be loose in the pelvis for long periods without causing complications, and often cause no complications at all, in the past, it has been recommended that open IUDs not be removed unless complications ensue. However, more recently, the recommendation has been made that all perforated IUDs should be removed because of the severe morbidity and mortality that late complications may cause [9].

Regarding the literature, minimally invasive methods such as laparoscopy [10] or cystoscopy are frequently preferred for the treatment [11]. However the management of misplaced IUD still remains controversial and no consensus opinion exists. Some in the literature suggests that the translocated IUD's should be removed electively as complications like adhesions and bowel obstruction has been reported and removal should be done as soon as the diagnosis is made. However this method has some limits because only a small part of IUD is often seen. We agree with most of the authors [12] that think that laparoscopy is invaluable in management of misplaced IUD. This method is associated with comfort, minimal hospital stay and early recovery and hence it is recommended as the preferred method for removal of misplaced IUD's.

CONCLUSION

Misplaced of IUD is a rare event. Migrated sites are often peritoneum and the bladder. We report a case of a perforated intrauterine device and laparoscopic removal from the omentum. Their managements are usually successfully performed by endoscopy surgery. Prognosis of patients is well after endoscopy approach for management of IUD migrated out from uterus cavity.

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Ethical Approval: This case report is exempt from ethical approval in our country.

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