

Should We Do A TV Scan After Difficult Coil Insertion

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Citation

S Nallapeta, V Bamigboye, J Amu. *Should We Do A TV Scan After Difficult Coil Insertion*. The Internet Journal of Gynecology and Obstetrics. 2008 Volume 12 Number 1.

Abstract

The LNG-IUS has gained great popularity for treatment of menorrhagia and as a good contraceptive agent. It has a low side effect profile; however, perforation of the uterus and migration of the device is a potentially serious complication known to be associated with its use. It is generally agreed that coil migration follows uterine perforation, but the exact moment of the perforation is controversial. The current accepted management is removal of the device from the abdominal cavity in order to prevent further morbidity. Hereby, we present a case of migration of LNG-IUS, 3 weeks after insertion. The LNG-IUS was embedded in the omentum in the right lumbar region and was removed laparoscopically without any complications. We recommend that a post-procedural trans-vaginal scan should be performed for all difficult insertions or if there was any doubt of perforation during the time of coil insertion.

INTRODUCTION

The levonorgestrel-releasing intrauterine system (LNG-IUS) also known as Mirena coil ® is a popular mode of progestogen releasing intra-uterine device for management of menorrhagia, especially with mild endometrial pathology. Migration of intrauterine contraceptive devices into peritoneal cavity has been described and poses challenges in localization and removal through the least invasive method. Laparoscopic removal is the desired method of management due to the low surgical and anaesthetic complications. We present the case of migration of LNG-IUS within three weeks of insertion of coil querying perforation at time of procedure or migration soon after.

CASE

A 41 yr old woman presented to emergency gynaecological services with history of intermittent colicky pain in right iliac fossa radiating to right hypochondrial region for 3 weeks following LNG-IUS insertion under general anaesthesia. The woman was initially seen in gynaecology clinic with history of heavy periods and post-coital bleeding. Hysteroscopy and endometrial biopsy led to a diagnosis of glandular cystic endometrial hyperplasia. Following consultation, the decision for LNG-IUS insertion under general anaesthesia was taken following a failed attempt in the clinic. The operative notes reveal that coil was easy to be inserted after an initial spasm. She had made uneventful recovery from the procedure and had gone home on same day. She was given a follow-up for six weeks with her

general practitioner. The patient does not recall being advised to feel for coil threads. On arrival to gynaecology ward, speculum examination and pelvic ultrasound did not show the coil in-utero. Abdominal radiograph revealed the coil in right lumbar region. (Figure 1)

Figure 1

Figure 1 - Abdominal radiograph showing the coil

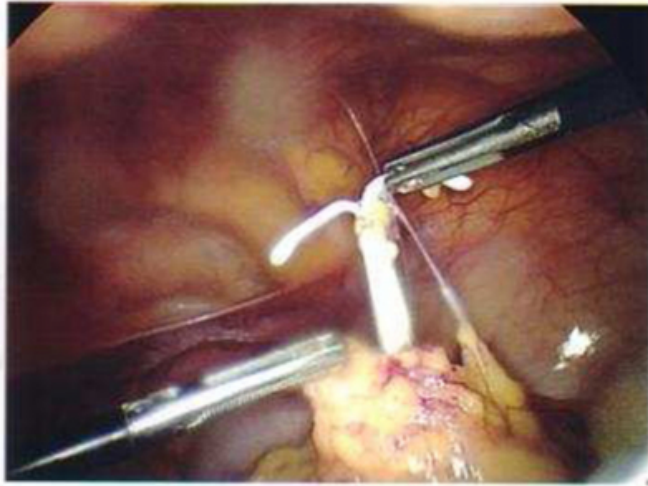


Emergency theatre was arranged to remove the coil via laparoscope, proceeding to laparotomy if needed. Laparoscopy was conducted and the LNG-IUS was seen embedded in the omentum in right lumbar region (Figure 2), but was easily retrieved with gentle counteraction on the omentum through a 5 mm laparoscopy port. There was no evidence of any uterine perforation and all pelvic organs

looked normal. Peritoneal cavity was filled with Adept® and procedure completed without any complications. Patient had an uneventful recovery and was discharged home the next day.

Figure 2

Figure 2 - IUS attached to omentum



DISCUSSION

The LNG-IUS is more effective than oral treatments in the management of menorrhagia [Penney et al. 2004]. The risks of coil insertion include pelvic infection, device expulsion, irregular bleeding and most importantly uterine perforation.

A recent study from the Netherlands focused on uterine perforations with a LNG-IUS and reported an estimated incidence of at least 2.6 per 1000 insertions [Van Houdenhovena et al. 2006]. Although perforation is most common at the time of insertion, this complication also can occur with a previously placed device. The supposed mechanism for uterine perforation is immediate traumatic perforation of the myometrium by the sound, the inserter tube or the IUD itself. Another mechanism might be partial perforation at the time of insertion, resulting in uterine contractions causing complete perforation [Andersson et al. 1998]. Uterine perforations at time of insertion are known to go undetected and equally asymptomatic migration of coil is missed as well.

In general, there seems to be a consensus for removal of a perforated IUD mainly because of the potential for adhesion formation [Haimov-Kochman et al. 2003]. Additionally, failure to localize and remove the “lost” IUD can result in severe intra-abdominal complications like haemoperitoneum and Colocolic fistulas [Goldman et al. 1983; Pirwany & Boddy 1997].

As shown in our case, the diagnosis happened three weeks post coil insertion. The diagnosis might have been earlier if education about thread check was properly imparted to the patient or post-procedure ultrasound scan had been performed. In view of aforementioned complications and often missed uterine perforations we recommend that women should be advised to feel for the threads soon after coil insertion and a post-procedural trans-vaginal scan should be performed for all difficult insertions or if there was any doubt of perforation during the time of insertion. Additionally, since the device may migrate to different parts of the abdomen or pelvis, the symptoms may vary. Hence, if the radiograph reveals a displaced intrauterine device, immediate gynaecological consultation and removal of the device is recommended to avoid complications.

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