CASE REPORT

Wandering intrauterine contraceptive device: An unusual travel to the sigmoid colon

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SUMMARY

Intrauterine contraceptive device (IUCD) is common choice for contraception. Migration of IUCD is one of the complications that are encountered. Here we report a case of IUCD migration to the sigmoid colon. A 39-year-old Malay lady carrying a copper T type of IUCD presented with missing thread then underwent examination under anaesthesia, proceeded to hysteroscopy but failed removal. Abdominal ultrasound detected it in the left lower quadrant of abdomen. She then underwent diagnostic laparoscopy where the device was found to be embedded in the sigmoid colon. Technical difficulty necessitated conversion to mini laparotomy and sigmoidotomy to remove the IUCD and the bowel closed primarily. IUCD is a relatively simple and safe contraceptive procedure but possible complications are bleeding and pain that usually co-exist, pelvic infection, expulsion and perforation. Investigations should be based on clinical suspicion and migrated IUCD in symptomatic patients should be surgically removed whereas, asymptomatic patients can be managed conservatively under certain circumstances. However in the presence of a concurrent pathology that requires exploration then retrieval of the migrated IUCD should be undertaken.

KEY WORDS:

Intrauterine contraceptive device; contraception; sigmoid colon; sigmoidotomy; laparoscopy; mini laparotomy; migration; uterine perforation; missing threads

INTRODUCTION

Intrauterine contraceptive device (IUCD) is one of the common choice for contraception. Migration of IUCD is one of the complications that are encountered. Commonly they present with missing threads but they can also present with pregnancy or an incidental finding on a routine examination where they're asymptomatic. Possible areas that they can end up are peritoneal cavity, colon, rectum, appendix, bladder.[1,2] Here we report a case of migration of IUCD to the sigmoid colon.

CASE REPORT

A 39 -year-old Malay lady Para 6+1 with one complete miscarriage had a copper T type of IUCD inserted a month after delivery, presented for a routine pap smear examination two months later whereby noted that the threads were not detected through the external cervical os. She underwent examination under anaesthesia and hysteroscopy in a different centre but the IUCD was failed to be located and removed. Subsequently in our centre we proceeded with abdominal ultrasonography whereby the IUCD was in the left lower quadrant of the abdomen thus no pelvis ultrasonography was performed. She underwent diagnostic gynaecological laparoscopy which showed that the IUCD was embedded in the in the sigmoid colon close to the anti mesenteric border. Technical difficulty necessitated conversion to mini laparotomy. Sigmoidotomy was performed to remove the IUCD, which was contained within the submucosal layer with no faecal contamination (Figure 1). The defect was closed primarily in two layers with polyglactin 2-0.

DISCUSSION

IUCD is a relatively simple and safe contraceptive procedure that is being used since 1965. Complications that are usually encountered are bleeding and pain that usually co-exist, pelvic infection, expulsion and perforation.[3] Another presentation is failed contraception and patient presents with pregnancy. Possible ways of migration are through perforation either acutely just after insertion especially during puerperium or through chronic erosion of the endometrium and myometrium like in the current case.[1,2] Migration has to be suspected whenever we fail to locate the threads via the cervix . Migration to the bowel can present with features of perforated viscus, rarely intestinal obstruction or can be asymptomatic like in the current patient. Mode of investigations depends on the suspected site of migration. Firstly a hysteroscopy should be performed to confirm diagnosis of an extrauterine IUCD. In terms of imaging abdominal radiograph would be the initial option whereby it may show the location and to detect complications such as perforation however ultrasonography is a more dynamic procedure, which may be more useful to locate the IUCD. A computed tomography would be the best tool to delineate the foreign object but limitation and risk of it should be born in mind. Endoscopy would be the gold standard choice if the initial imaging showed migration to the large bowel whereby an endoscopic removal could be attempted but failure will necessitate laparoscopy or laparotomy depending on available expertise. In cases where the IUCD floating freely in the peritoneal cavity laparoscopic removal is advised but if there's any technical difficulty it's justified to convert to laparotomy. Upon retrieval of the IUCD if the perforation is small it can be closed primarily but large

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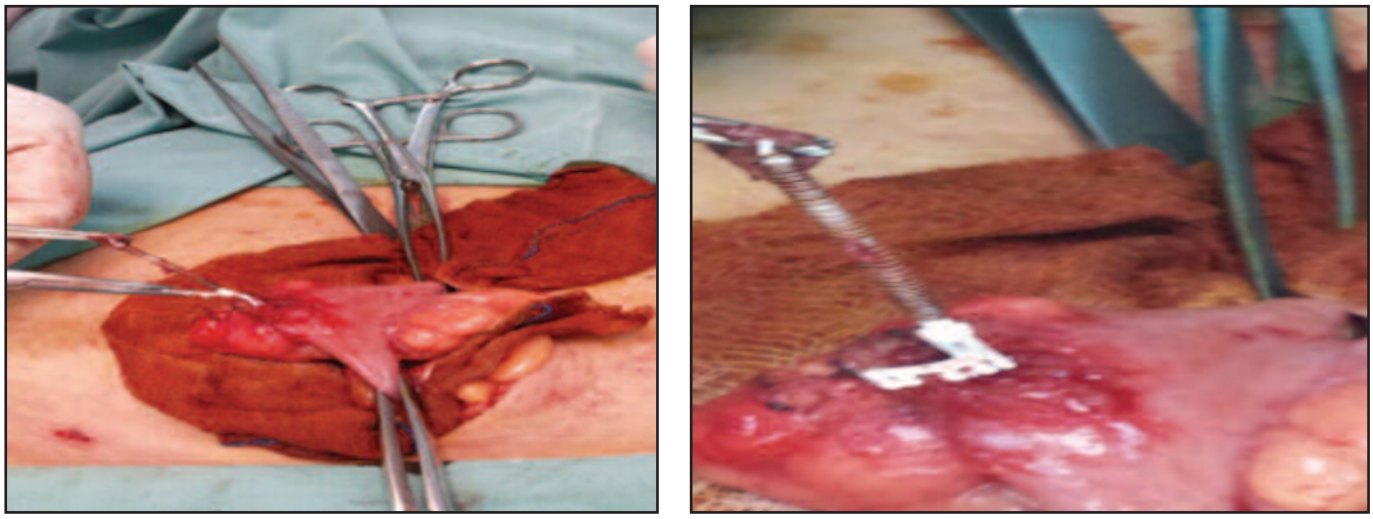

Fig. 1: Depicting the removal of copper T type IUCD from the incision made in the anti mesenteric border of the sigmoid colon.

ones might need colostomy and subsequent reversal. Considering all this, localization of the IUCD preoperatively allows good operative planning. However it's controversial whether to ignore or remove the extrauterine IUCD especially in asymptomatic cases. According to Markovich *et al.*[2] migrated IUCD in symptomatic patients should be surgically removed whereas, asymptomatic patients can be managed conservatively under certain circumstances. However in the presence of a concurrent pathology that requires exploration then retrieval of the migrated IUCD should be undertaken.

CONCLUSIONS

IUCD is still a relevant and useful method of contraception but close follow up is needed to detect complications and subsequent management. In terms of managing extrauterine migration we should advocate surgical removal in symptomatic patients. Endoscopy serves as a diagnostic tool and for therapeutic removal in case of migration to the colon. Laparoscopic removal is the gold standard for intra-abdominal migration but possibility of conversion to laparotomy is always present. Multidepartment involvement in particular, gynaecology and surgery is warranted in successfully managing these patients.

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