Mystery of the missing loop

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INTRODUCTION

Migration of Lippes loop consequent to fimbrial extrusion is rare. Its detection four decades after insertion is rarer. Detection of coexistent caecal malignancy during the search for migrated Lippes loop due to mismatch between clinical presentation and initial imaging is exceptional. We report such a singular case.

CASE REPORT

A 75-years-old female presented with colicky pain in hypogastrium, loose stools and weakness of one month duration. General examination revealed stable vital parameters, cachexia, gross pallor pedal oedema but no icterus, lymphadenopathy or distended neck veins. Lower abdomen was distended, umbilicus was transversely stretched, however, no dilated veins or nodules were seen. Tenderness/guarding were absent but shifting dullness was present. Bowel sounds were increased. Laboratory investigations were unremarkable excepting anaemia (7 g/dL). Abdominal radiograph showed dilated ileal loops with a diameter >3 cm and a radio-opaque foreign body in right lower quadrant (Figure 1) resembling Lippes loop, a vintage intrauterine contraceptive device (IUCD). Leading questioning disclosed IUCD insertion 40 years ago. Ultrasonography showed dilated small gut and free fluid in the abdomen. Initial impression suggested sub-acute intestinal obstruction consequent to migrated IUCD, warranting exploration. However, reasons for gross anaemia, cachexia and ascitis remained unexplained. Contrast enhanced computerised tomogram (CECT) was done which revealed growth in caecum, with an IUCD adjacent to, but not penetrating its wall (Figure 2). On exploratory laparotomy, a large growth almost occluding the caecal lumen was found causing ileum to grossly dilate. Lippes loop, was found protruding from the right fimbria and adherent to tip of appendix (Figure 3). However, it had no contribution to intestinal obstruction. Right haemicolectomy was performed after

freeing the IUCD from right fimbria. Histopathology confirmed adenocarcinoma of caecum.

DISCUSSION

Migration of IUCD is a known complication, with an incidence ranging from 1 to 4 per 1000 insertions.^{1,2} Migration occurs predominantly due to uterine perforation either acutely, at the time of insertion, especially during puerperium, or gradually, due to chronic erosion of endo/myometrium.^{2,3} Very rarely, IUCDs migrate by extrusion through fimbria, as in this case.⁴

Figure 1 Abdominal radiograph showing dilated small gut and migrated intrauterine contraceptive device.

Figure 2 Contrast enhanced computerised tomogram showing migrated intrauterine contraceptive device.

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Figure 3 Per-op photo showing the intrauterine contraceptive device protruding out of right fimbria and adherent to appendix tip.

Devices migrate commonly to adjacent recto-sigmoid and urinary bladder.^{1,2} However, migrations do occur to omentum, peritoneum, peri-appendicular area (as in this case), small intestine, ovary, gallbladder, and sub-diaphragmatic region, in decreasing order of incidence.¹⁻⁷

Most of the IUCD migrations have been of copper T which incites copious tissue reaction and is, hence, symptomatic.¹⁻⁷ Perforation of hollow viscous, intractable lower abdominal pain, persistent pelvic inflammatory disease, recurrent urinary infections, vesical stone formation and intestinal obstruction are some of the presentations.¹⁻⁷ However, IUCDs, such as, Lippes loop, are quite inert and cause little symptoms, hence, are detected incidentally, as evident by this case.⁸ Disappearance of thread without history of spontaneous expulsion might trigger off search for missing device.^{3,8}

Imaging forms the backbone of detecting displaced IUCDs, symptomatic or otherwise.¹⁻⁸ Hysteroscopy, cystoscopy, endoscopy, plain radiographs, ultrasonography and CT have been used singly or in combination to locate the displaced IUCDs.¹⁻⁸

Management options for symptomatic migrations range from formal open surgery to minimally invasive techniques, depending upon the presentation/situation.^{1,3,5,7} Opinion is divided regarding retrieval of those migrated IUCDs that do not cause any symptoms.^{1,5} Some favour immediate retrieval, particularly, of copper containing devices, to avoid potentially disastrous consequences. Others prefer leaving them alone, especially, those made of inert material, such as, Lippes loop.^{1,5} However, consensus is clear on elective retrieval of asymptomatic migrated IUCDs when abdomen is explored for other reasons, as in the contemplated case.⁵ Most of the retrievals can well be done by minimal invasion using laparo-endoscopes, however, even use of guided laparotomies is justified.^{2,5,7,8}

Although, coexistence of concomitant pathology is rare, but is very much a probability, especially, in cases where there is mismatch between clinical picture and preliminary investigations. Such cases do warrant further investigation, which, in the current era of advance imaging, splendidly reveal the complete picture for apt management.

This case proves exceptional in ways more than one. Encountering migrated Lippes loop, a vintage IUCD, 40 years after insertion, is rare. Its fimbrial protrusion is rarer. This case is singular in literature where search for missing IUCD lead to detection of a sinister concurrent pathology. This case amply underscores the complimentary role of clinical impression and advanced imaging.

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CONFLICTS OF INTEREST

None.

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