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Case Report

Acute abdomen due to falope ring migration after laparoscopic tubal ligation

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ABSTRACT

Falope ring migration has not been reported to produce signs and symptoms suggestive of abdominal or pelvic pathologies. Clinical diagnosis is virtually impossible, and radiological investigations appear imminent to rule out common pathologies. A 40-year-old woman developed severe abdominal pain almost 17 years after laparoscopic tubal ligation with Falope ring. Contrast-enhanced computed tomographic (CECT) scan of the abdomen and pelvis revealed a 3.1×2.6 cm lesion in the inframesocolic compartment of mesentery. Patient was conservatively managed with a two-week course of antibiotics and analgesics for the next seven days following which she improved symptomatically. The patient was contacted after six months of index hospitalization, and she was not willing for surgery as she did not develop symptoms during those six months. This presented patient indicates the possibility of delayed Falope ring migration and it may lead to an abdominal pathology which can masquerade several clinical problems.

Keywords: Falope ring, Abdominal pain, Tubal ligation, Computed tomography scan

INTRODUCTION

Falope ring is commonly used for laparoscopic female sterilization and has been reported to cause fewer complications than electrocautery or diathermy.[1] However, numerous reports of Filshie clip migration have been reported.

Filshie clips migration was known to produce symptomatology ranging from extrusion of clips from anatomical sites to varying abdominal pain, sepsis, and sinuses. Symptomatic manifestations were reported as early as one month or as late as 20 years after tubal ligation.[2-4] Falope ring is now used routinely and has not been reported rarely to migrate because of its unique design.[5]

Here, in this report, we presented a 40-year-old female, who reported in our hospital outpatient department with vague abdominal pain 17 years after laparoscopic tubal ligation.

CASE REPORT

A 40-year-old multiparous woman presented in the outpatient department of gynaecology, JIPMER, Pondicherry with a history of severe lower abdominal pain and vomiting for one week. The pain increased on bending forward and on straining at defecation. She had a regular menstrual cycle. She had two normal vaginal deliveries followed by laparoscopic tubal ligation 17 years ago. On examination, the abdomen was rigid and tenderness could be elicited in the umbilical region and right iliac fossa. Further examination revealed an ill-defined mass just below the umbilicus of approximately 5 cm maximum diameter. Per vaginum examination revealed anteverted and normal sized uterus, while fornices were tender on deep pressure. The urine pregnancy test was negative, and rest of the pelvic, vaginal, and abdominal examination was unremarkable. Other systemic examination and laboratory investigation were also unrevealing. Transvaginal ultrasound examination revealed 4×3 cm left sided hydrosalpinx. Uterus and ovary were normal. Contrast-

enhanced computed tomographic (CECT) scan of the abdomen and pelvis revealed a 3.1×2.6 cm lesion in the inframesocolic compartment of mesentery (Figure 1). The falope ring was visualized within the centre of the lesion in the mesentery with surrounding fibrotic changes. Falope ring was noted in the right adnexa only, and the left adnexal falope ring was absent.

Patient was conservatively managed with oral antibiotic and analgesics (capsule doxycycline 100 mg BD and tablet metronidazole 400 mg TDS) for the next fourteen days following which she improved symptomatically. Hysterosalpingogram showed bilateral tubal blockage and no evidence of spontaneous tubal recanalization (Figure 1). The patient was advised to visit the hospital if symptom recurred or at the end of six months due to prevailing COVID-19 pandemic for laparoscopic retrieval of the ring. The patient was contacted after six months of index hospitalization, and she was not willing for surgery as she did not develop symptoms during these six months. The patient gave written informed consent for publication of anonymized data.

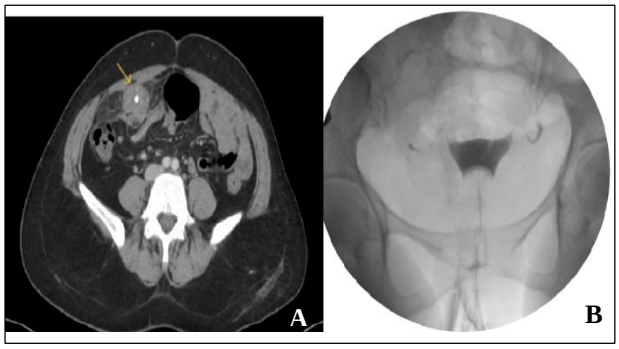

Figure 1: (A) Transverse section of CT scan of abdomen showing migrated falope ring (arrow) with surrounding foreign body granuloma; and (B) hysterosalpingogram showing bilateral tubal blockage and no spillage of dye.

DISCUSSION

This report highlights the consequences of falope ring migration after tubal ligation. To the best of our knowledge, symptomatic falope ring migration has not been reported so far. Therefore, displaced falope ring leading to vague abdominal pain appeared extremely unlikely. Moreover, several common clinical diagnoses are generally attributed to pain in middle-aged women. Abdominal pain and discomfort in a middle-aged woman should always be viewed seriously. A focussed history and physical examination may not suffice for clinical diagnosis, and the patient may require an urgent ultrasound or CT scan to rule out various pathophysiology.

The patient was told to report after six months for laparoscopic ring extraction due to prevailing COVID-19 pandemic. She was unwilling for surgery as she did not get pain or abdominal discomfort during the last six months. Moreover, she did not require any medication for pain relief after discharge from the hospital during the index hospitalization.

Filshie clip migration has been documented frequently and has been reported in the causation of myriad pathophysiology inside the abdomen and pelvis.[6] Additionally, symptomatology of Filshie clip migration has been reported as late as 20 years.[7,8] Published reports have also documented tubal recanalization and pregnancy in women who had Filshie clip migration.[9]

Our patient presented as late as 17 years after tubal ligation. However, tubal recanalization was not noticed in this patient, as reported earlier.[5]

Filshie clip is known to produce two blind stumps of Fallopian tube because of avascular necrosis. Surrounding adhesion and fibrosis usually prevent migration of Filshie clip from a blind stump. Differences in design and materials in these two commonly used rings may produce different pathophysiology and symptomatology.[10,11] Unlike the Filshie clip, the infrequent incidence of falope ring migration could be incidental as women might not manifest symptomatology to get an ultrasound or CECT scan. Furthermore, unlike the Filshie clip where the occlusive procedure is followed, the falope ring is applied after looping of the Fallopian tube, and it involves the banding procedure. Surrounding pathophysiological changes around the rings may include peritoneal adhesion and fibrosis and a difference in the extent of these changes might be responsible for the difference in the migration rate. Nevertheless, based on available reported literature, symptomatic manifestation of Filshie clip migration appears considerably higher than falope ring.

CONCLUSION

Falope ring migration could happen and, it should always be ruled out during an ultrasound or CECT scan while making a clinical diagnosis during workup of abdominal pain or discomfort.

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