Case Report

Intraluminal Endometriosis: A Rare Entity

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ABSTRACT

The case presents an incidental finding of a rare variety of endometrioses in both the fallopian tubes termed intraluminal endometriosis in a 52-year-old female.

KEYWORDS: *Abdominal pain, endometriosis, intraluminal endometriosis*

INTRODUCTION

Endometriosis is an estrogen-dependent disease-causing lower abdominal pain and infertility; the pathogenesis is not entirely understood.[1,2] Endometriosis is associated with endometrial glands and stroma abnormally lying outside the uterus. Endometriosis can be related to at least three different unrelated lesions in the fallopian tube. A rare entity is an intraluminal endometriosis, unassociated with endometriosis elsewhere.[2]

CASE REPORT

A 52-year-old female patient presented with heavy blood flow and pelvic pain complaints. She had a history of vaginal delivery 20 years ago. She was not on any contraception for the past 2 years. General physical examination and speculum and pelvic examination were normal. Pelvic ultrasound showed evidence of two small-sized (FIGO (International Federation of Gynecology and Obstetrics) grade 5) leiomyomas, diameters varying from 1cm to 2 cm. Cervix and bilateral adnexa were normal in size and position. Per-operative, there was no sign of endometriosis in ovaries, tubes, or pelvic peritoneum. There was no peritubal adhesion. Panhysterectomy was performed, and the patient was discharged on the 3rd postoperative day without any complications.

Gross examination revealed a specimen of total abdominal hysterectomy with the bilateral salpingo-oophorectomy. Uterus with cervix measured 5 cm × 4.5 cm × 3.5 cm. The specimen was externally unremarkable; the cut section showed the cervical canal 2 cm long. Endometrium thickness was 0.3 cm and myometrium thickness was 1.4 cm. Myometrium showed multiple leiomyomas varying in diameter from 1 cm to 4 cm. The cut surface of the leiomyoma was gray-white and firm to hard and showed whorling. The right fallopian tube was 5.0 cm long and 1.2 cm in diameter. The right ovary measured 2 cm in maximum dimension. The left fallopian tube was 5.5 cm long and 1.1 cm in diameter. The left ovary measured 2.2 cm in maximum dimension. Externally and on the cut section, both ovaries and tubes were unremarkable.

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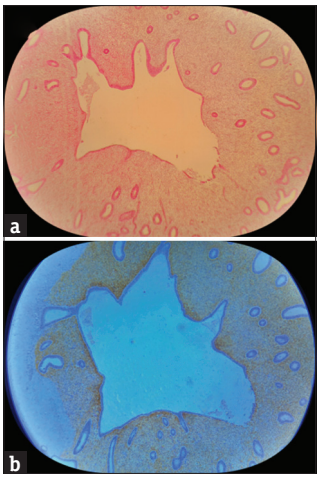

Figure 1: (a) Photomicrograph showing endometriotic foci in the circumferential mucosa of the fallopian tubes (H and E, ×100). (b) Photomicrograph showing positive immunostaining in periglandular endometriotic stroma (CD10, ×100)

Microscopically, endometriotic foci were observed in the circumferential mucosa of both the fallopian tubes [Figure 1a]. The entire resected material was evaluated histologically; endometriotic foci were seen only in the mucosa of the fallopian tubes. Serosa and tunica muscularis of the fallopian tubes did not show any focus. The periglandular endometriotic storm showed membranous immunoreactivity for CD10 [Figure 1b]. The case was reported as myometrial leiomyomas and incidental bilateral intraluminal tubal endometriosis.

Discussion

Dr. John Albertson Sampson (1873–1946), the father of endometriosis, worked on the pathology and pathogenesis of endometriosis.[1,3] The finding of endometrial tissue in the fallopian tube is pathological and is considered tubal endometriosis irrespective of its pathogenesis. The patient may be asymptomatic or present with chronic pelvic pain, infertility, and dyspareunia.[3,4] The diagnosis of endometriosis is not only of obvious importance to the patient, but its recognition can also be of great help to the pathologist in accounting for synchronous findings that might otherwise be problematic.[1] The histologic diagnosis of endometriosis is usually straightforward. It is based on the typical presence of both endometriotic glands and stroma, but the diagnosis can also be made when only one of these components is present. The glands almost always have an overtly endometrioid appearance ranging from inactive to proliferative (or occasionally, secretory) to hyperplastic.[1,3] The prevalence of endometriosis in reproductive age women is 3%–10% and in infertile women is 25%–35%.[2] Endometriosis can occur in nearly every organ of the body and manifest with different clinical symptoms mimicking unrelated diseases.[2]

An unadorned diagnosis of "tubal endometriosis" is ambiguous as it has been applied to three different fallopian tube lesions. The most common is endometriosis involving the tubal serosa or subserosa and is associated with pelvic.[1] Endometrial tissue may extend directly from the uterine cornu and replace the mucosa of the interstitial and isthmic portions of the tube in as many as 25% and 10% of women in the general population, respectively. The ectopic endometrial tissue may give rise to intratubal polyps in some cases.[3,4] The second and rare type is intraluminal endometriosis. It is typically unassociated with endometriosis elsewhere.[2] This variant accounts for about 15% of tubal-related infertility and may also be associated with tubal pregnancy.[3] The endometrial tissue may occlude the tubal lumen. Therefore, it is termed intraluminal endometriosis ("endometrial colonization").[4] The third type of endometriosis involving the fallopian tube has been designated as postsalpingectomy endometriosis. It occurs in the tip of the proximal tubal stump, typically 1–4 years following tubal ligation. Postsalpingectomy endometriosis has been documented in 20%–50% of tubes examined following ligation.[3,4]

Our patient observed an incidental finding of intraluminal endometriosis in bilateral fallopian tubes, a rare presentation of endometriosis.[5]

Conclusion

Intraluminal endometriosis is an extremely rare type of endometriosis, with only five cases reported to date. Although all the cases were reported in the past decade, the etiology is still unknown. Thus, this case represents a rare sight and a rare case for endometriosis.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient (s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initial s will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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Conflicts of interest

There are no conflicts of interest.

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