

Endometriosis presenting as carcinoma colon in a perimenopausal woman

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ABSTRACT

Endometriosis is a common benign disease of reproductive age women, and can involve the intestinal tract. Inconsistent clinical presentation, similar features on radiological imaging and colonoscopy with other inflammatory and malignant lesions of the bowel makes the preoperative diagnosis of bowel endometriosis difficult. We present a case of a 42-year-old perimenopausal female clinically presented, investigated and managed in the lines of carcinoma of sigmoid colon. She underwent terminal ileac resection with end to end anastomoses, Hartmann's procedure and total hysterectomy with bilateral salpingoophorectomy. The histopathological report revealed endometriosis of small intestine, large intestine, mesentery, right ovary and adenomyoma of uterus. Thus, bowel endometriosis should also be considered as differential diagnosis in reproductive age women with gastrointestinal symptoms or intestinal mass of uncertain diagnosis.

Key Words: Bowel resection and end to end anastomosis, carcinoma colon, endometriosis

INTRODUCTION

Endometriosis is defined as presence of endometrial glands and stroma outside the uterine cavity.^[1] It can involve pelvic and extra pelvic organs. The most common site of extra pelvic endometriosis is intestine followed by pleura, pericardium, umbilicus, previous operative or episiotomy scars, etc. Intestinal endometriosis occurs in 3-37% of these patients and the common sites are recto sigmoid area (72%), rectovaginal septum (13%), small intestine (7%), caecum (3.6%) and appendix (3%) and the clinical presentation is usually asymptomatic, but gastrointestinal bleeding, nausea, vomiting, cramp-like abdominal pain, painful defecation, diarrhoea, constipation, recto-vaginal colonic mass, intussusception, bowel obstructions and intestinal

perforation can be seen.^[2,3] Classically, in around 40% of the cases, symptoms get worse during menses.^[4] Radiological imaging and endoscopic evaluation of the intestinal tract may be suggestive of other inflammatory and malignant lesions of bowel. Though definitive diagnosis of colorectal endometriosis preoperatively is difficult, clinical suspicion may prevent extensive and morbid surgical procedures.

We present a perimenopausal lady with intestinal and ovarian endometriosis, in which the preoperative diagnosis was carcinoma of sigmoid colon. She was managed by resection and end to end anastomoses of terminal ileum, Hartmann's procedure and total abdominal hysterectomy with bilateral salpingoophorectomy.

CASE REPORT

A 42-year-old woman presented with history of pain abdomen, altered bowel habits and bleeding per rectum for

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4 months. She had increased frequency of stools, associated with passage of clots during defecation on and off and loss of weight of 10 kg over 4 months. She had irregular menstrual cycles with dysmenorrhea since last 3 years. Imaging was done during evaluation: Ultrasound whole abdomen showed $6.6 \times 4.4 \times 6.7$ cm heterogeneous mass lesion in left hemi-pelvis infiltrating uterus and adjacent bowel loops, uterus and right ovary were normal, left ovary could not be seen. Impression on CECT abdomen was a polypoidal intramural growth of $3.9 \times 3.6 \times 3$ cm in sigmoid colon consistent with malignancy with contiguous spread to uterus and metastatic mesenteric and pericolic nodes with no ascites and normal uterus and adnexal structures. Tumor markers were done and CA125 was 172.4U/ml (Normal <35), CEA-0.4 (<5ng/ml), CA 19-9 was 67.28 (Normal <37 ng/ml). Pap smear showed inflammatory cells. Colonoscopy was performed and biopsy was taken from suspected intramural mass in sigmoid colon. The histopathology report was hyperplastic polyp. The patient was counselled for surgical intervention in view of high suspicion of sigmoid colon cancer with possible extension to uterus and adnexa. Preoperative ureteric stenting done and exploratory laparotomy was performed. Intraoperatively, there was no ascites. Malignant washings sent for cytology came out to be negative. A 7×6 cm mass was seen in the left pelvis, possibly arising from left adnexa densely adherent to terminal ileum, sigmoid colon and upper rectum with obstruction around 15 cm proximal to ileocaecal junction. Uterus and right adnexa were normal. Ileac resection and end to end anastomosis, Hartmann's procedure along with total abdominal hysterectomy with bilateral salpingo-oophorectomy was done. Postoperative period was uneventful. Histopathology of the specimen reported endometriosis. Small intestine shown focally ulcerated lining epithelium, lamina propria had moderate lympho-nuclear cell infiltrates with foci of endometrial glands and stroma. Sections from large intestine shown multiple dilated endometrial glands and stroma seen transmurally from submucosa to serosa. Mesentery also showed extensive endometriosis. There was no evidence of malignancy in the sections examined. Resection limits were viable and not involved in the process. Endometrium was in proliferative phase, myometrium had adenomyosis, left ovary and fallopian tube were endometriotic, right ovary and tube were of normal morphology. There was no serious post-operative complication. She was planned for post-operative hormonal suppression with GnRH agonist. There was no evidence of recurrence until her recent visit.

DISCUSSION

Endometriosis is a common gynaecological disorder with varied etiologies and presentations involving pelvic and extrapelvic organs. The most common extrapelvic organ is

bowel and the symptoms of intestinal endometriosis may include abdominal pain, bloating, signs and symptoms of gastrointestinal obstruction, bleeding per rectum etc., depending on the segment of bowel involved.^[5] Rectum and sigmoid colon are involved in 95% of cases of bowel endometriosis. Symptoms may be cyclical in approximately 40% of the patients or usually aggravate during menses.^[4] The preoperative diagnosis of intestinal endometriosis by imaging modalities like USG, CT is difficult and rare because of more other common intestinal pathologies, including inflammatory diseases and tumors.^[6] History of dysmenorrhea, infertility, endometriosis and magnetic resonance imaging (MRI) may be helpful pointers.^[7] An endoscopic biopsy has limited role because the mucosal layer is rarely affected by endometriosis.^[8] In the index case, the preoperative diagnosis was sigmoid colon cancer, however there was transmural involvement of bowel wall from submucosa to serosa. Similar case report published in 2009 mentioned five patients admitted for surgical resection of rectal and sigmoid colon tumors, which were subsequently revealed to be intestinal endometriosis. The average age of the patients was 39.8 years (range, 27-47 years). There was one nullipara who had been explored for infertility. Two patients were asymptomatic, two patients complained of hematochezia, and one patient had obstipation. Of the symptomatic patients no one had symptoms related to menstruation. Colonoscopy was performed in all five patients and revealed an ulcero-fungating mass in two cases, mucosal protrusion without mucosal abnormality in one case, luminal narrowing with extrinsic compression in one case and a polypoid mass in one case. Two anterior resections and three low anterior resections were performed. All surgical specimens were endometriotic according to final pathology reports.^[9] Another patient presented with bleeding per rectum for 3 months. Colonoscopy showed stricture in the sigmoid colon which cannot be advanced to the sigmoid colon. Sigmoidectomy was done and histopathological specimen revealed endometriosis.^[10] Treatments of intestinal endometriosis depend on the presenting symptoms and operative findings. Medical hormonal therapy with progestins, danazol, GnRH agonists may be tried but rarely successful in severely symptomatic disease.^[11] If there are features of intestinal obstruction, then surgical intervention in the form of bowel resection and end to end anastomoses may be required. Superficial lesions can be excised and followed by estrogen suppression such as GnRH agonist or aromatase inhibitor, but medical therapy of intestinal endometriosis is unclear. The definite treatment of endometriosis is removal of both ovaries and complete excision of endometriotic tissue laparoscopically or by laparotomy.^[12] Women who have severe or intestinal

endometriosis are to be treated by a team involving gynecologists, surgeons with expertise. In index case; the preoperative and intraoperative findings were suggestive of gastrointestinal malignancy due to complex mass with dense adhesions involving bowel and adjacent adnexa. Terminal ileal resection and end to end anastomosis with total hysterectomy and bilateral salpingo-oophorectomy were performed. The histopathological examination revealed intestinal endometriosis. After surgery, patient received GnRH agonist and there was no evidence of recurrence until report time (9 months).

CONCLUSION

Intestinal endometriosis is to be considered as one of the differential diagnosis in reproductive age women with gastrointestinal symptoms or mass of uncertain diagnosis. Symptoms may neither be cyclical nor aggravate during menstruation. Preoperative evaluation and diagnosis may be inconclusive and challenging. Diagnostic laparoscopy and frozen section may be considered. Management requires multidisciplinary team approach and follow-up.

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Conflicts of interest

There are no conflicts of interest.

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