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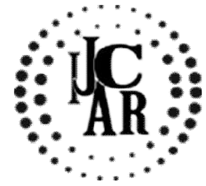

Research Article

# ENDOMETRIOSIS -RARE CAUSE OF SMALL BOWEL OBSTRUCTION

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A R T I C L E I N F O

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A B S T R A C T

**Introduction:** Endometriosis is a disease where endometrial tissue grows outside the uterus. The endometrial tissue gets deposited over extra-uterine place like ovaries, fallopian tubes, pouch of Douglas, bowel, pelvis and ureter. Younger female patients are more prone to develop this problem andmainly presents with chronic pelvic pain, infertility and non-specific complaints like dysmenorrhea, dyspareunia and change in bowel habits. Diagnosis of endometriosis is based on symptoms and imaging. But tissue biopsy is diagnostic of endometriosis.
**Case report:** In our case report, 43-year-old female presented in OPD with complaint of features suggestive of intestinal obstruction. CECT abdomen suggested bilateral ovarian endometriosis and inflammatory thickening in distal small bowel possibly endometrial deposits. She underwent laparotomyand resection anastomosis done for dense thick stricture in proximal ileum mimicking malignancy. Histopathology report suggested endometriosis of stricture segment with adhesions.
**Conclusion:** Small bowel obstruction due to endometriosis is rare and we can make differential diagnosis in younger fertile female with history of chronic pelvic pain.

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## INTRODUCTION

Endometriosis is uncommon disease of young female patients. Endometriosis is defined as presence of endometrial tissue in extra uterine sites [1, 5, 6].According to previous data, prevalence of endometriosis is around 10 to 15% in young female patients [1, 2]. There is multiple hypothetical theories regarding development of endometriosis and its etiology but exact reason is still unknown. Although bilateral ovaries is very common site but endometrial deposits over large intestine is more common than small bowel. Sigmoid colon, rectum are common sites and reported prevalence is 3 to 35% in younger female population. Ileum is rare site of intestine involvement in endometriosis. Usual complaints are chronic pelvic pain, dysmenorrhea, dyspareunia, menstrual irregularities, vomiting, abdominal distension, constipation loose motions.[3].All symptoms are associated with pelvic and ovarian endometrial tissue deposits. Some times due to dense thick deposits over intestinal surface, rare complication associated with intestinal obstruction like perforation, gangrene may worsen the condition. This condition may mimic as malignant stricture, intestinal TB, Inflammatory bowel disease in 8 to 10% patients of endometriosis[1, 2] .This condition could not clearly diagnose in routine ultrasonography. Laparoscopy and biopsy is diagnostic for endometriosis.

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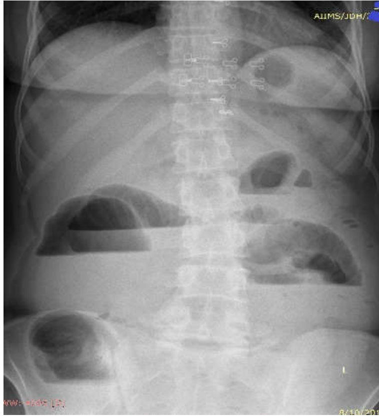
### *Case history*

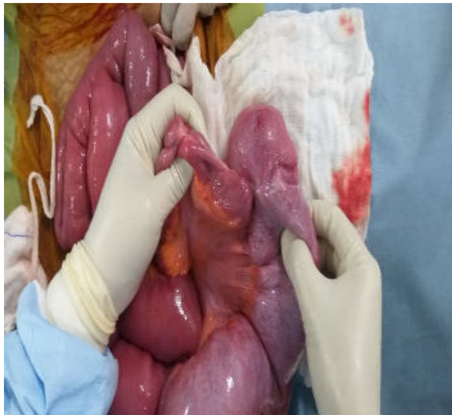
A 43 year old female was admitted in general surgery department with complaint of severe pain abdomen and abdominal distension for 5 days and vomiting, obstipation for 3 days. Patient had similar complaint of lower abdominal pain and episodic vomiting in last 6 months. She also complaint of metrorrhagia for last 6 months and treatment was taken. In routine blood investigation showed hemoglobin 8.9, total protein 4.9, albumin 2.5 and other were normal. X-ray chest was normal and x-ray abdomen showed multiple air fluid levels in Central abdominal region. CECT abdomen suggested bilaterally enlarged ovaries with endometriosis, hemato-salpinx and distal small bowel thickening probably due to serosal deposit of endometrial tissue.

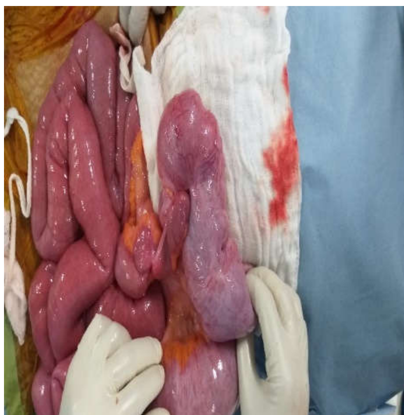
On examination she had mild tachycardia, afebrile and normal blood pressure. Abdomen was soft, mild tender. Per rectal examination was normal. Patient was admitted and diagnosis was made as an intestinal obstruction with benign cause. Intraoperatively a complete stricture with thicken proximal one feet of ileum was found. Resection -anastomosis was done. Nasogastric tube was removed on post operative day 3 and patient was allowed liquids per orally. Drain was removed on POD 5 and patient was discharged on day 6 with satisfactory condition. Final histopathology report suggested endometrial tissue deposits in intestinal

Picture showing x-ray abdomen erect with air fluid level and intraoperative stricture stricture, thickened bowel and

omentum. She was referred to gynecology department for further management.







## DISCUSSION

Intestinal endometriosis was first reported by Sampson in 1924.Retrograde menstruation is hypothetical theory of endometrial tissue deposits in pelvis and ovaries[7]. Some other theories suggested metaplastic transformation of pleuri-potent and peritoneal mesothelium, mullerian remnants, neural sheath pathway endometriosis deposits due to various genetic alterations[8,9,10]. Usual sites of intestinal endometrial deposit areovaries, bilateral fallopian tubes, pouch of Douglas, Colon, rectum, coccyx in 50 to 80% of endometriosis but small bowel prevalence is around 4%[1, 2]. Commonsymptoms like menstrual irregularity, dyspareunia, chronic pelvic pain, dysmenorrheaare due to pelvic and ovaries deposits and Constipation, loose stools associated with bowel deposit. Endometriosis is very difficult to diagnose in absence of abnormal menstrual history and normal ultrasonography. Diagnostic laparoscopy and biopsy is definitive procedure to make a proper diagnosis. White thick glistening deposit are visible in pelvis as well as bowel with or without sign of obstruction in laparoscopy. The seserosal deposits can invade in muscular layer and increase neovascularization and fibrosis which leads to obstructive symptoms. Endometrial tissue deposit in recto-sigmoid can mimick as carcinoma recto-sigmoid, in those cases colonoscopy findings suggestive of narrow lumen due to sub-serosal deposit with normal mucosa can rule out malignancy[13, 14]. Previously many studies were done for treatment of endometriosis with application of intrauterine norgesterol device and oral contraceptive pills. Although hormonal therapy is mainstay of endometriosis treatment but this cannot reverse the pathogenesis of bowel deposit so surgical resection of obstructive part is essential for recovery [11]. GnRH and LH releasing analogues are most useful hormonal therapy for medical management of endometriosis [12] .

## CONCLUSION

Small bowel obstruction is rare complication of endometriosis and this diagnosis to be kept in mind as differential in young female patients with clinical sign of intestinal obstruction.

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