



## INTESTINAL ENDOMETRIOSIS

### Surgery

**Dr Akanksha Mahendra**

Resident, Dept of Surgery, Bharati Vidyapeeth Deemed to be University, Pune

**Dr Pravin Borkar**

Associate Professor, Dept of Surgery, Bharati Vidyapeeth Deemed to be University, Pune

**Dr Ravindran Kharat**

Professor Dept of Surgery, Bharati Vidyapeeth Deemed to be University, Pune

### KEYWORDS

Endometriosis is a chronic condition which generally affects young women of reproductive age. It is defined as presence of endometrium glands outside the uterine cavity. Bowel involvement accounts for 5%-12% of women presenting with the disease<sup>1</sup>. Rectum and sigmoid are involved in 90% of the intestinal lesions<sup>2</sup>. We hereby present a case of pain in abdomen in a 46-year-old female with a histopathological diagnosis of intestinal endometriosis.

### Case

A 46-year-old female presented with complains of pain in abdomen, which was sudden in onset, generalized, no aggravating or relieving factors and not radiating. It was associated with multiple episodes of vomiting (around 6-8) non projectile and containing food particles. She has an irregular menstrual cycle associated with dysmenorrhea which was managed with analgesics. Her last menstrual cycle was 2 months ago. She is an operated case of laparoscopic cholecystectomy and has also undergone two caesarean sections. On examination there was diffuse tenderness and abdominal distension. She had a pulse rate of 100/min and Blood pressure of 160/100 mm hg. Xray Erect abdomen was done which was suggestive of multiple air fluid levels. Further a CT abdomen and pelvis was done which was suggestive of jejunal loops, proximal and mid ileal loops appear dilated and show multiple air fluid levels. The transition point is possibly on distal ileum. Uterus is bulky and shows ill-defined lesions in the body suggestive of fibroids. Her laboratory investigations were within normal limits, and she was posted for a diagnostic laparoscopy which was suggestive of multiple strictures over ileum for about 20 cm of ileal segment and 15 cm from Ileocecal junction. A band is present over Ileocecal junction connecting caecum to the right fallopian tube. An exploratory laparotomy was done and around 20 cm of ileum with strictures was resected and end to end anastomosis was done. Patient was started on liquid diet on post op day 3 and was tolerating soft diet by the 7<sup>th</sup> post operative day and was discharged. The resected segment of ileum was sent for histopathological diagnosis which was suggestive of multiple foci of endometriosis in muscularis propria, and some of them show hemorrhage in the glandular lumen.



Figure 1: Resected Specimen

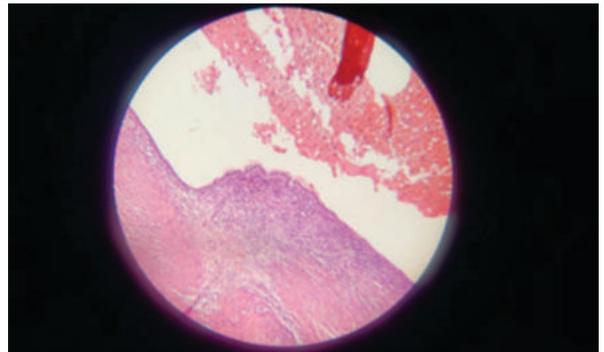


Figure 2: Multiple Foci Of Endometriosis In Muscularis Propria, And Some Of Them Show Hemorrhage In The Glandular Lumen.

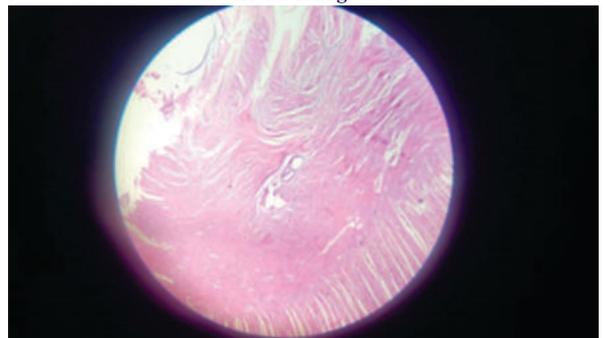


Figure 3: Another Slide Showing HPE Of Resected Segment Of Ileum

### DISCUSSION

Deep endometriosis is defined as sub peritoneal invasion by lesions exceeding 5 mm in depth. Disease involving the bowel can be associated with severe pain<sup>7</sup>. Symptoms can include dysmenorrhea and dyspareunia. Symptoms like diarrhea, constipation and bowel obstruction depend on localization, size of nodule, and depth of involvement of the bowel wall. Any pelvic symptoms especially cyclical must raise the suspicion of endometriosis<sup>1</sup>. The gold standard for diagnosis is visual inspection on diagnostic laparoscopy. The rectum and sigmoid colon are involved in 90% of all intestinal lesions<sup>2,3</sup>. The symptoms are not just related to the lesion but also to the associated fibrotic reactions causing pelvic adhesions and anatomical distortion that can persist even after lesion becomes inactive. Patients must be informed regarding need for resection of the affected portion of the intestine, also possible need for a protective stoma. Stoma is required in 10-14% of the cases undergoing bowel resection for deep infiltrating bowel endometriosis. Till date there is no clear guideline on evaluation of patients with suspected bowel endometriosis. CT is an important first line modality for screening to map the lesions and see bowel thickening. Although CT might reveal bowel wall thickening with the main lesions, it is not sufficient to diagnose intestinal endometriosis because evaluations of the invaded bowel wall or the characteristics of the mass cannot be exactly performed with CT images. MRI is one of the most commonly used techniques for this

purpose. A contrast-enhanced mass or hyperintense foci on T1-weighted MRI strongly suggest the presence of haemorrhagic foci secondary to endometriosis. The sensitivity and specificity of MRI in detecting pelvic endometriosis is around 90%<sup>1,2</sup>. Transvaginal ultrasound (TVUS) may identify the presence of pelvic endometriosis with a relatively high accuracy (sensitivity, 83%; specificity, 94%) and help in estimating the depth of infiltration of the nodules in the intestinal wall<sup>5</sup>. Evaluation of the operative history of patients has an important role in the diagnosis of intestinal endometriosis. The positive correlation between a previously operated pelvis and endometriosis has been reported previously in other studies. Although the mechanism is not known well, endometrial cells are believed to be incidentally implanted into the peritoneum during pelvic surgery, which can develop into pelvic endometriosis. Previous treatment for endometriosis is also an important factor in diagnosing intestinal endometriosis. The overall recurrence rate of endometriosis is reported to be up to 67%. The recurrence of endometriosis after bowel resection has been reported in 4.7%-25% of cases during the follow-up period of > 2 years<sup>6</sup>. Particularly in deep infiltrating endometriosis, the recurrence rate is higher with lymph node involvement or lymph vascular invasion<sup>7</sup>. Thus, intestinal endometriosis should be considered if patients presenting with abdominal symptoms have a history of endometriosis. There are various surgical treatment methods for intestinal endometriosis, including resection and anastomosis, discoid resection, and superficial shaving<sup>6</sup>. In this case the diagnosis was made based on histopathology. It is thus important to ask for history of menorrhagia, dysmenorrhea in patients of reproductive age group presenting in intestinal obstruction.

## REFERENCES

1. Alabiso G, Alio L, Arena S, et al. How to manage bowel endometriosis: the ETIC approach. *J Minim Invasive Gynecol*. 2015;22(4):517–529. doi: 10.1016/j.jmig.2015.01.021
2. Koh CE, Juszczak K, Cooper MJW, Solomon MJ. Management of deeply infiltrating endometriosis involving the rectum. *Dis Colon Rectum*. 2012;55(9):925–931. doi: 10.1097/DCR.0b013e31825f3092
3. Darai E, Bazot M, Rouzier R, Houry S, Dubernard G. Outcome of laparoscopic colorectal resection for endometriosis. *Curr Opin Obstet Gynecol*. 2007;19(4):308–313. doi: 10.1097/GCO.0b013e328216f6bc
4. Roman H, Ness J, Suci N, et al. Are digestive symptoms in women presenting with pelvic endometriosis specific to lesion localizations? A preliminary prospective study. *Hum Reprod*. 2012;27(12):3440–3449. doi: 10.1093/humrep/des322
5. Goncalves MO, Podgaec S, Dias JA, Jr, Gonzalez M, Abrao MS. Transvaginal ultrasonography with bowel preparation is able to predict the number of lesions and rectosigmoid layers affected in cases of deep endometriosis, defining surgical strategy. *Hum Reprod*. 2010;25:665–671.
6. Meuleman C, Tomassetti C, D'Hoore A, Van Cleynenbreugel B, Penninckx F, Vergote I, D'Hooghe T. Surgical treatment of deeply infiltrating endometriosis with colorectal involvement. *Hum Reprod Update*. 2011;17:311–326.
7. Randall GW, Gantt PA, Poe-Zeigler RL, Bergmann CA, Noel ME, Strawbridge WR, Richardson-Cox B, Hereford JR, Reiff RH. Serum antiendometrial antibodies and diagnosis of endometriosis. *Am J Reprod Immunol*. 2007;58:374–382