

A Distinctly Rare Cause of Haemafecia: Recto-Sigmoid Endometriosis

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Authors' contributions

This work was carried out in collaboration among all authors. Authors SP and AS conceptualized the manuscript, collected data, wrote the first draft of the manuscript. Authors NB and IM did the literature review and helped in editing the manuscript. Author CG analyzed the histopathological image and provided orientation about the pathology. Authors AKT, VK, SS, VKD and DPY contributed to supervision of manuscript. All the authors read and approved the final manuscript.

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Case Report

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ABSTRACT

Endometriosis is defined as the growth of functional endometriotic gland and stroma outside the uterine cavity. Although it is common in women of reproductive age (10-12% of menstruating females), extra genital endometriosis is considerably rare. Bowel involvement is estimated to occur in 5%–12% with the recto-sigmoid region involved in up to 90% of these cases. Recto-sigmoid endometriosis may manifest with abdominal pain, constipation, and rectal bleeding. For diagnosis radiological investigations like Transvaginal ultrasound and MRI pelvis are widely used, endoscopic biopsy is less rewarding, however surgically resected specimen provides appropriate tissue for diagnosis. The management consists of hormonal therapy including Oral Contraceptive pills,

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Gonadotrophin releasing hormone analogue and surgical resection of affected segments. Hence recto sigmoid endometriosis can present as a rare etiology of haematochezia. We present the case of a 25-year-old Caucasian female patient with recto-sigmoid endometriosis.

Keywords: Endometriosis; haemafecia; lower gastrointestinal bleeding; recto-sigmoid colon; laparoscopic excision.

1. INTRODUCTION

Endometriosis is defined as the presence of endometrial glands outside the uterine cavity [1]. Usually it is benign gynecological condition occurring in 10-15 % of menstruating women [1]. It can manifest as Ovarian, Superficial Peritoneal or as deep infiltrating Endometriosis (DIE) [2]. These lesions may affect the uterosacral ligaments, rectovaginal space, gastro-intestinal tract, or urinary tract. GIT involvement is estimated to occur in 5 % of cases, with the recto sigmoid region involved in up to 90 % of the cases [3].

There can be varied manifestation of recto-sigmoid endometriosis like – Pelvic pain, altered bowel habits, Dyschezia [4], and on rare occasions it can present with haemafecia and mimics as colorectal malignancy [5] and hence causes diagnostic dilemma in patients presenting with symptoms of lower gastrointestinal bleed. Here we present a rare case report of a young female presenting with haemafecia during menstruation.

2. CASE DESCRIPTION

A 25 year old female patient presented to Gastrointestinal OPD with complaints of recurrent episodes of hematochezia with moderate left lumbar and hypo gastric region pain during menses for the last 5 years. As per patient her Age of menarche is 15 years her menstrual history is suggestive of dysmenorrhea. Her cycle span is of 30-32 days, menstruation duration is of 2-3 days along with cramping lower abdominal pain which relieves partially after taking analgesics. Patient was asymptomatic for 5 years post menarche. As the time elapsed the symptoms ensued lasting for 5-7 days during her menstrual periods, however the intensity of pain and quantity of blood loss over the years remained constant. The patient was admitted for evaluation of the symptoms. On examination there was no pallor, vitals were normal with no added general examination findings. On systemic examination per abdomen was soft, non distended with mild left lower quadrant

tenderness, there was no organomegaly. Other systems were unremarkable on examination. On Digital rectal examination, bright red colored staining of the examining finger was found. Per vaginal examination was not performed as the patient being sexually naïve. On laboratory investigations, Hemoglobin was 10.5 g/dl, with normal Total leukocyte counts and other biochemical parameters were within normal limits. On colonoscopic examination, there was hemi circumferential proliferative growth, starting from 10 to 20 cm from anal verge with overlying edematous and erythematous mucosa up to 2 cm causing luminal narrowing and scope couldn't be negotiated easily through it (Fig. 1). Biopsy of the lesion was taken. Biopsy was suggestive of non-specific inflammatory cells infiltrate in lamina propria without any distortion of architecture, non-specific colitis.

On MRI Pelvis, there was an ill-defined moderately enhancing plaque like eccentric soft tissue thickening along anterior wall of upper rectum and recto-sigmoid junction, over a length of approximately 4.5 cm, maximum thickness being 1.8 cm. Hypo intense on T1/T2 weighted imaging with mushroom cap appearance, and lesion is adherent to serosal surface of posterior wall of uterus with obliteration of cul-de-sac. The lower edge of lesion is approximately 10 cm above the anal verge. 18 x 15 mm sized T1 hyper intense and T 2 hypo intense lesion was seen in left ovary s/o chocolate cyst. These finding were suggestive of solid invasive endometriosis of recto-sigmoid colon with chocolate cyst of left ovary. The patient was subjected to surgical management in the form of Laparoscopic excision of endometriosis plus resection and anastomosis of rectum. Ovarian and tubal relationship was restored for normal fertility. The excised surgical sample was sent for histopathological examination which was suggestive of endometrial glands along with endometrial stroma and fine capillary network penetrating the muscularis propria of bowel (Fig. 2). 6 months after the surgery the patient has got her normal periods and did not have any episode of haematochezia post surgery. The patient is healthy and pursuing normal life.

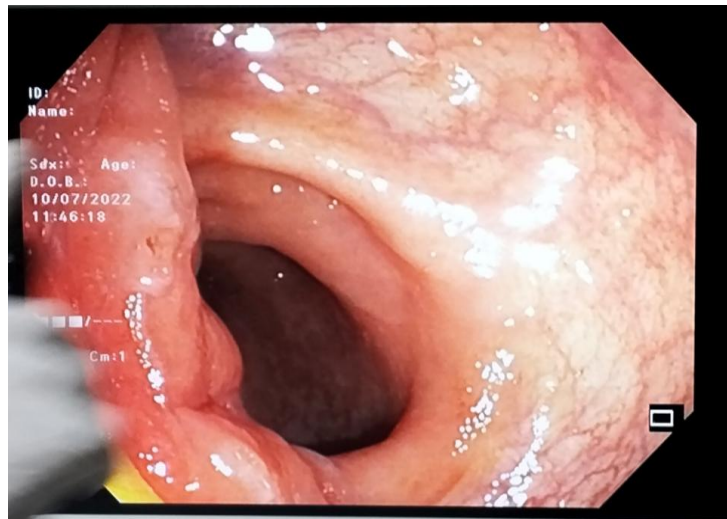


Fig. 1. Hemicircumferential proliferative growth at 10 to 20 cm from anal verge as evident on Colonoscopic view

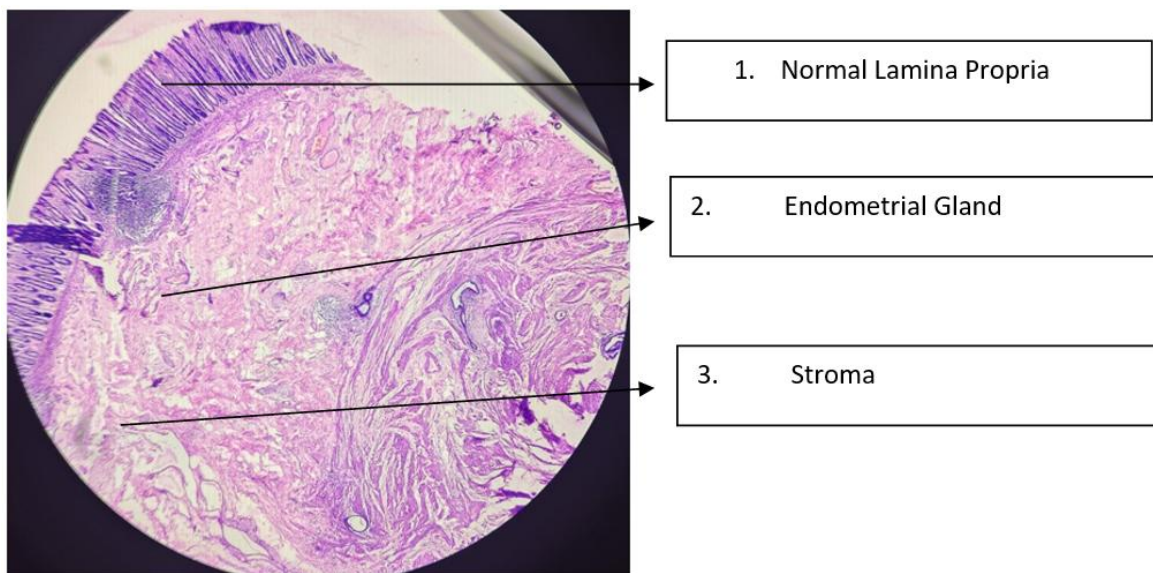


Fig. 2. Histopathological examination of surgically resected specimen

3. DISCUSSION

Intestinal endometriosis can present with non-specific symptoms like altered bowel habits, hematochezia and might overlap with other clinical entities like IBD or Colorectal malignancy [6]. Detailed medical history and examination needs to be done for prompt diagnosis and interventions in such patients. Clinical features vary depending upon the location and depth of the lesion, lower abdominal pain represents the most common symptom, the presentation may vary with dysmenorrhea, dyspareunia or non-specific pelvic pain [7]. Invasive lesions may present as abdominal pain, constipation, diarrhea

or tenesmus and rarely as haemafecia depending upon the site and nature of involvement. For the diagnosis of endometriosis modalities like transvaginal ultrasound have high specificity and sensitivity but tend to miss sigmoid lesions [8]. MRI being less operator specific and less subjective variations is therefore preferred for diagnosis and localization above the recto-sigmoid region. However, MRI lacks sensitivity for measuring the depth of the lesion owing to the artifacts caused by bowel peristalsis [9]. Colonoscopy is less rewarding as the lesions tend to be located extrinsically but our patient had a positive yield on colonoscopy. The gold standard for diagnosis remains direct

visualization under laparoscopy [10]. Other modalities like CT scan, barium enema and endorectal ultrasound have been used but varied results [9].

Medical management and surgical explorations remains the major treatment. Medical management should be considered in patient who are not surgical candidates and who are not interested in immediate pregnancy [9]. Oral Contraceptive and progestin pills constitute the first line of therapy [11] which induces a pseudomenopausal state and reduces the fluctuations of gonadal steroids, stimulating atrophy of endometrial lesions [12]. Gonadotrophin-releasing agonists or danazole remains the second choice [13]. Medical management remains suppressive rather than curative option and needs long term administration [14] and consequently constituting symptomatic treatment.

Surgical intervention is to be chosen for patient refractory to medical treatment [15]. Varied excision methods are described for surgical removal of the tissue like Shave excision, Disc resection, and segmental resection. Segmental resection is advisable only with bowel stenosis, lesions larger than 3 cm or involving > 50% of the circumference of the bowel wall [16], and it is associated with least recurrence compared to other surgical methods.

In concise, recto-sigmoid endometriosis accounts for a rare cause of lower gastrointestinal bleeding and presents as a major challenge for gastroenterologist and gynecologist since differentiating diagnosis from colorectal malignancy could be difficult. Hence, this diagnosis should always be kept in mind while evaluating a child bearing female with hematochezia.

4. CONCLUSION

Extrauterine endometriosis is a very rarely encountered entity. In the gastrointestinal tract most common location being the recto-sigmoid colon, the differential diagnoses includes inflammatory bowel disease, Colo-rectal malignancy etc. This cause should always kept in mind while evaluating a young reproductive age group female with bleeding per rectum.

CONSENT

All authors declare that written informed consent was obtained from the patient for publication of this case report and accompanying images.

ETHICAL APPROVAL

As per international standard or university standard written ethical approval has been collected and preserved by the author(s).

COMPETING INTERESTS

Authors have declared that no competing interest exists.

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