

ORIGINAL ARTICLE

FLEXIBLE SIGMOIDOSCOPIC FINDINGS IN EVALUATION OF BLEEDING PER RECTUM IN YOUNG PATIENTS

Fayyaz Hussain, Muhammad Asif Farooq*, Yasir Farooq**, Muhammad Alamgir Khan**

Department of Medicine and Gastroenterology, Combined Military Hospital, Kharian, *Military Hospital, Rawalpindi,

**Department of Physiology, Army Medical College, Rawalpindi, Pakistan

Background: Bleeding per rectum is a trivial symptom in young individuals. It may be overt or occult. Overt bleeding can be acute, massive or chronic. The aim of this study was to see flexible sigmoidoscopic findings in evaluation of bleeding per rectum in young patients. **Methods:** This was a cross-sectional descriptive study conducted at Gastroenterology Unit of CMH, Malir, Karachi, from Jan 2015 to May 2016. All young patients, aged <50 years, referred for evaluation of bleeding per rectum, during the study period were included. Detailed history, physical examination and all baseline investigations were carried out. Flexible sigmoidoscopies were carried out after necessary preparation and informed consent. A total of 50 young patients with bleeding per rectum as only symptom underwent flexible sigmoidoscopy during study period. The sigmoidoscopic findings were documented and additional information was recorded. **Results:** A total of 50 subjects were included in the study. The mean age of patients was 30.8 years. They included 44 male and 6 female patients. The sigmoidoscopic findings included haemorrhoids 56%, rectal ulcers 22%, proctitis 12%, anal fissure 8%, and polyps 2%. No procedure related complication or growth was observed. **Conclusion:** Flexible sigmoidoscopy is a useful investigation to evaluate the cause of bleeding in patients presenting with bleeding per rectum. Most of young patients had benign aetiology of bleeding per rectum, with haemorrhoids being the commonest finding.

Keywords: Bleeding per rectum, Flexible sigmoidoscopy, haemorrhoids

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INTRODUCTION

Bleeding per rectum is a common but trivial symptom in young individuals. It is a manifestation of lower gastrointestinal bleed, which means bleeding from a place distal to ligament of Treitz. Bleeding per rectum may be overt or occult, and overt bleeding can be acute, massive or chronic.

Lower gastrointestinal endoscopy is a standard procedure to see the mucosa in cases of bleeding per rectum. Proctoscopy examines the anal canal and rectum. Rigid sigmoidoscopy examines the rectum and the sigmoid colon whereas flexible sigmoidoscopy gives view up to splenic flexure of colon.¹ Flexible sigmoidoscopy can be performed without sedation and preparation with enema.² Anorectal pathology is benign in 90 % young cases with per rectal bleeding.³ However, a standard protocol should include a good history followed by proctoscopy which may clinch the diagnosis in most cases. Patients in their 20s with outlet-type bleeding may undergo just flexible sigmoidoscopy; if no lesion is found, colonoscopy is warranted.

Most studies done locally had included colonoscopy and with no upper age limit and revealed ulcerative colitis and colorectal carcinoma as the common findings.⁴⁻⁶ Limited data has been presented in article form based on flexible sigmoidoscopy findings in patients with bleeding per rectum in Pakistan.⁷ This study was carried out to see flexible sigmoidoscopic

findings in evaluation of bleeding per rectum in young patients.

PATIENTS AND METHODS

It was a cross-sectional descriptive study carried at gastroenterology unit of Combined Military Hospital Malir a tertiary care hospital in Karachi from January 2015 to May 2016. For the study, the young patient was defined as one aged less than 50 years. All consecutive patients of either gender with age >16 years with rectal bleeding as sole symptom were included in the study. Those with anaemia due to suspected upper gastrointestinal source of bleeding, i.e., history of haematemesis or gastric aspirates containing coffee-ground material or bright red blood, and altered bowel habits or diagnosed cases of inflammatory bowel disease were excluded.

Referrals included only fresh cases either from outdoor or indoor. Detailed history, physical examination and all baseline investigations were carried out. Patients received Bisacodyl and Kleen[®] enemas for preparation. After explanation of procedure and the consent, the procedure was done in left lateral position under conscious sedation with up to 3 mg Midazolam IV. The vitals were monitored throughout the procedure. At the end, the patient was observed for any complications and let to go home or ward on complete recovery from sedation. Results were entered and analyzed using SPSS-19.

RESULTS

A total of 50 young patients with bleeding per rectum as the only symptoms underwent flexible sigmoidoscopy over a period of 1.5 years. The mean age of the subjects was 30.8 years. The study included 6 female and 42 male patients. One case of rectal polyp was noted in the study, all the rest had anorectal location of pathology. (Table-1).

The endoscopic findings included haemorrhoids, rectal ulcers, proctitis, anal fissures, and polyps in the order of frequency (Table-2). No procedure complications were recorded. Out of 50 patients, two had no detectable pathology. Of those who had proctitis, 3 had ulcerative colitis histology and 2 had non-specific findings. Among those had rectal ulcers, one had a solitary rectal ulcer and others had non-specific proctitis. None of patients had any malignant growth.

Table-1: Frequency of variables studied [n (%)]

Variables	Number (%)
Males	44 (88)
Females	6 (12)
Endoscopic Diagnosis	48 (96)
Anorectal location of pathology	49 (98)
Rectal Polyp	1 (2)

Table-2: Frequency of findings at flexible sigmoidoscopy of bleeding per rectum [n (%)]

Condition	Number (%)
Haemorrhoids	28 (56)
Rectal Ulcers	11 (22)
Proctitis	6 (12)
Anal Fissure	4 (8)
Polyp	1 (2)

DISCUSSION

Bleeding per rectum is a common symptom in young population. Use of flexible sigmoidoscopy offers a cost effective approach in patients with bright red bleeding of anorectal source.³ It do not require the extensive and expensive preparations essential for colonoscopy and still gives very good diagnostic results. In our study endoscopic diagnosis of 96% of the patients was made by flexible sigmoidoscopy, reflecting it as a very reliable diagnostic tool for evaluation of bleeding per rectum.

There was male preponderance among the patients presenting with bleeding per rectum in our study (44 out of 50). This can be either because of less prevalence of anorectal diseases in females or because women are reluctant to report such disorders because of social reasons.

In our study haemorrhoids are the commonest finding and it is similar to the result of the study carried out by Bhatti *et al.*⁷ They also recorded significant number of patients having proctitis and this is also consistent with the findings of our study. However they

had significant number of growth, diverticulum and angiodysplasia, probably due to inclusion of patients up to age of 90. Finding of haemorrhoid in our study was different from the study carried out by Zia *et al* due to inclusion of haemorrhoids in their exclusion criteria.⁴ Proctitis was the common finding in that study too.

Rectal bleeding in association with change in bowel habit and age over 60 year is a powerful predictor of colorectal cancer.⁸ None of young patients in our study had any growth. However, age alone should not be taken as a differentiating feature in cases of bleeding per rectum. There have been studies in which, none among patients with rectal bleeding who were younger than 50 years of age had colorectal cancer on a follow up to 10 years^{9,10}; a finding that remains to be validated in our study as it will require a 10 year follow-up. A retrospective study of rigid sigmoidoscopy was conducted in a Medical School Sigmoidoscopy Centre to determine the yield of procedure with emphasis on neoplastic lesions.¹¹ A total of 6,125 procedures were done on patients aged from 16 to 90 years. Haemorrhoids were the most frequent finding (46.1%) and 12.6% had neoplastic lesions. Commonest finding of haemorrhoid was also found in our study but high incidence of malignancy in that study was due to inclusion criteria of age up to 90 years in that study.

CONCLUSION

Flexible sigmoidoscopy is an effective investigation to find out the causes of bleeding per rectum in majority of young patients. Haemorrhoids were the commonest finding followed by rectal ulcers, proctitis, anal fissures, and polyps.

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Address for Correspondence:

Maj Yasir Farooq, Department of Physiology, Army Medical College, Rawalpindi, Pakistan. **Cell:** +92-301-5177210

Email: yasardoc@yahoo.com

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