

Diagnostic Evaluation of Patients Presenting with Bleeding Per Rectum by Sigmoidoscopy

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ABSTRACT

Objective: To document various endoscopic findings in patients undergoing sigmoidoscopy for bleeding per rectum.

Design: Observational

Patients and methods: The data of 51 patients with complaint of bleeding per rectum who underwent flexible sigmoidoscopy in endoscopy unit of medical unit III Services Hospital Lahore from January 2010 to December 2010 was analyzed. Demographic features and endoscopic diagnoses were noted.

Results: Among 51 patients, 43.1% had haemorrhoids with red sign, 23.5% had ulcerated areas in the recto sigmoid area, 17.6% had rectal polyps and 11.7% had hard mass in the recto sigmoid area.

Conclusion: The most common reason for bleeding per rectum was bleeding from haemorrhoids.

Key words: Sigmoidoscopy, haemorrhoids.

INTRODUCTION

Lower gastrointestinal bleeding (LGIB) accounts for approximately 20-33% of episodes of gastrointestinal hemorrhage. Although LGIB is statistically less common than upper gastrointestinal bleeding (UGIB), it has been suggested that LGIB is underreported because a higher percentage of patients with LGIB do not seek medical attention¹.

Lower gastrointestinal bleeding (LGIB) refers to blood loss of recent onset originating from a site distal to the ligament of Treitz². It is usually suspected when patients complain of hematochezia (passage of maroon or bright red blood or blood clots per rectum). This is different from the clinical presentation of upper GI bleeding, which includes hematemesis (vomiting of blood or coffee-ground like material) and/or melena (black, tarry stools). Although helpful, the distinctions based upon stool color are not absolute since melena can be seen with GI bleeding from the right colon (or small intestine), and hematochezia can be seen with massive upper GI bleeding³⁻⁶.

The vast majority of patients referred to surgeons for investigation of rectal bleeding have benign anal disease or proctitis.¹ Because of the fear of missing colonic cancers, patients are probably being over investigated. Full evaluation of the colon in all these patients imposes a considerable strain on the hospital resources and also exposes the patients to significant inconvenience and morbidity. The relative risk for colonic cancer in a 45 year old with no family history of colonic cancer is 1%⁷. The aim of our

study was to assess the number of patients undergoing flexible sigmoidoscopy for rectal bleeding and document their endoscopic findings.

PATIENT AND METHODS

The data of 51 patients who underwent flexible sigmoidoscopy for bleeding per rectum in our endoscopy unit from 1st January 2011 to 31st December 2011 was scrutinized. Patients were referred from inpatient, outpatient and accident & emergency departments. A written informed consent was taken from every patient before the procedure. Conscious sedation with midazolam and tramadol was used in anxious patients and injectable flouroglucinol was used as antispasmodic if needed. Sigmoidoscopy findings were documented and abnormal areas were biopsied and sent for histopathology.

RESULTS

The mean age of patients was 37 years. Sex distribution is tabulated below:

Gender	=n	%
Female	25	49
Male	26	51

Findings on sigmoidoscopy for bleeding per rectum are tabulated below:

Findings	=n	%
Haemorrhoids	22	43.1
Ulcerated areas in recto sigmoid area	12	23.5
Polyps	9	17.6
Hard mass recto sigmoid area (ca?)	6	11.7

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DISCUSSION

Because of the fear of missing colonic cancers, it is possible that patients with benign perianal diseases are being over investigated. The concern for most patients with rectal bleeding is whether there is an underlying neoplasia. The diagnostic yields of colonic cancers in such patients are very low⁷. During the life of an adult, rectal bleeding has a reported incidence of between 16% and 33%^{6,8}. Colonoscopy would be a safe option, but if all of these patients were to undergo colonoscopy, then it would pose a great economic burden. Flexible sigmoidoscopy diagnoses the majority of significant pathologies in patients with rectal bleeding and thus it would be a more sensible alternative.

From the patient's description of the bleeding, it may not be possible to localize the site to a benign lesion originating from the anus^{9,10}. There is a lack of agreement as to the need for and the type of further investigation. In patients with rectal bleeding, age is the most significant variable in predicting colorectal cancers and polyps. Change in bowel habit is second only to age in predicting colorectal cancers and polyps¹¹.

In a 10 year prospective study of 201 individuals at the Veterans Affairs Medical Centre in California with rectal bleeding, none of the patients below the age of 50 years had cancer¹². Similarly, in the Netherlands, a study of 290 consecutive patients with rectal bleeding found that no patients aged less than 50 years had colorectal cancer¹³.

In our study the most common cause of bleed was haemorrhoids. The leading causes of significant LGIB in the United States are diverticulosis and angiodysplasia¹³. Diverticulosis accounts for around 30-50% of the cases of hemodynamically significant LGIB, whereas angiodysplasia accounts for about 20-30% of cases¹³. Some experts believe that angiodysplasia is the most frequent cause of LGIB in patients older than 65 years.

Hemorrhoids are the most common cause of LGIB in patients younger than 50 years, but bleeding is usually minor and is rarely the cause of significant LGIB. According to a review of 7 series of patients with LGIB, the most common cause of LGIB was diverticulosis, accounting for approximately 33% of cases, followed by cancer and polyps, which accounted for about 19% of cases¹⁴.

The second common cause of bleeding per rectum was ulcerative colitis. A large study in India found an incidence of 6.02/10⁵ per year and a crude prevalence rate of 44.3/10⁵ inhabitants¹⁵. Among Whites, the reported incidence of ulcerative colitis varies from 3 to 15/10⁵ persons per year with a prevalence of 50–80/10⁵ Persons¹⁶.

CONCLUSION

Sigmoidoscopy has a very high diagnostic yield and would be recommended in the workup of patients presenting with bleeding per rectum. Haemorrhoids followed by ulcerative colitis were the leading cause of bleeding per rectum in this study.

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