

COLONOSCOPY FINDINGS IN PATIENTS PRESENTING WITH BLEEDING PER RECTUM

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ABSTRACT

Objectives: The aim of study was to determine the frequency of different causes of lower gastrointestinal bleeding as found on colonoscopy in patients presenting with bleeding per rectum.

Material and Methods: A cross sectional study, in which 100 patients with lower gastrointestinal bleed presenting to medical A ward Khyber Teaching Hospital and those referred to private clinic for colonoscopy were included during the period May 2013 to August 2013.

Results: Out of 100, 43% patients had hemorrhoids, 19% patients had ulcerative colitis, 14% patients had colorectal carcinoma, 12% patients had polyps, 6% patients had infective colitis, 2% patients had anal fissure, 2% had radiation proctitis, 1% had solitary rectal ulcer and 1% were found to have familial adenomatous polyposis.

Key Words: Lower gastrointestinal bleed, colonoscopy.

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INTRODUCTION

Bleeding from lower Gastrointestinal tract, that is the anus, rectum or colon may be in the form of bright red blood (hematochezia), clots or burgundy stools (melena). It is defined as bleeding originating distal to the ligament of Treitz.¹ This ligament is an important anatomical landmark in separating upper and lower gastrointestinal tracts. Annually 20-30 per 100,000 cases in western countries, the bleeding is massive, requiring 3-4 units of blood transfusion in 24 hours.² Lower gastrointestinal bleed is however more commonly in the form of small amount and chronic intermittent bleed.^{3,4}

The most common causes of lower gastrointestinal bleed are anorectal including hemorrhoids, fissures and fistulas. Colitis due to inflammation or infection is the next most common cause. However in children and adolescents polyps (juvenile) is a common cause. Other causes of lower gastrointestinal bleed include

colonic neoplasia, vascular ectasias, ischaemic colitis and diverticular diseases. Factors increasing the risk of lower gastrointestinal bleed are advanced age and the use of non-steroidal anti inflammatory drugs.⁵ The risk of bleeding in ulcerative colitis and diverticular disease is also increased with the use of non-steroidal anti inflammatory drugs.^{6,7}

All patients with lower gastrointestinal (GI) bleed are initially assessed with a detailed history and physical examination. The presentations of lower gastrointestinal bleed may also be variable, like a young patient with fever, crampy abdominal pain and bloody diarrhea would most likely have Inflammatory bowel disease. Children with bleeding usually have polyps. Similarly in patients with past history of cancer chemotherapy and radiation, radiation proctitis should be considered.

After initial resuscitation, a flexible colonoscopy should be performed. A rapid bowel preparation with volume cathartic agent has a higher diagnostic and therapeutic yield as compared to un-prepared colonoscopic examination.⁸ Colonoscopy is the test of choice in most patients with a diagnostic accuracy of upto 90%.⁹ Golytely is administered orally or via a nasogastric tube, till the effulgence is cleared of stool particles and between 4-8 liters is usually required.¹⁰ The aim of this study was to find the frequency of different causes of lower gastrointestinal bleed in our community. Benign conditions such as hemorrhoids, fissures and polyps

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can be treated effectively and cancer phobia dispelled. Inflammatory bowel disease patients are counseled about life long therapy and the importance of screening colonoscopies explained.¹¹ With increasing risk of colorectal cancer in advanced age, these lesions can be detected early and treated to reduce mortality.¹²

MATERIAL AND METHODS

In this cross-sectional study, all patients presenting to Medical A ward Khyber Teaching Hospital, Peshawar with bleeding per rectum was included. In addition, all patients referred to private clinic for colonoscopy, having small amount chronic bleeding per rectum were also included.

All patients undergoing colonoscopy were screened for hepatitis B and C, along with anti-HIV Serology before the procedure. In addition, BT/CT and PT/APTT were also done to rule out clotting abnormalities. A clinical proforma recording the age, sex and co-morbid conditions was also maintained. All patients with cirrhosis liver, bleeding disorders, peritonitis and evidence of upper GI bleed as hematemesis were excluded. In addition, all patients in whom full length colonoscopy could not be performed due to any cause, as poor preparation or patient unable to tolerate the procedure were also excluded from the study.

All patients were counseled regarding the procedure an informed consent was taken. Patients were prepared with fluid diet and laxatives for forty-eight hours before the procedure.

Colonoscopy was performed with CE 0197 Olympus full length colonoscope by a well trained colonoscopist having postgraduate experience of more than 10 years. Sample size was 100 patients. Data analysis was done using SPSS version 10. Frequency and percentages were calculated for all categories.

RESULTS

A total of 100 patients above the age of 15 years were examined. The mean age was 50 years \pm 1.27. Most of the patients (72%) were between the ages of 22-50 years, 15% patients were between the ages of 50-65 years and 13% patients were 15-22 years of age. Total 87 patients were females and 23 were male patients.

In 43 patients, hemorrhoids were found on colonoscopy, without any other pathology in the proximal colon. Nineteen patients had macroscopic changes of colitis, ranging from a mildly friable mucosa that bleeds to touch to a more florid colitis with pseudopolyps. Twelve patients had polyps either sessile or pedunculated mostly in the rectum. Fourteen patients had colonic cancer, 6 patients were found to have infective colitis,

2 had anal fissure, 2 patients had radiation proctitis, 1 was found to have a solitary rectal ulcer and 1 patient had familial adenomatous polyposis.

DISCUSSION

Lower gastrointestinal bleed is an alarming situation. It may be massive in which case it can be life-threatening or more commonly presents as intermittent chronic, small bleed per rectum. This study was conducted to find the frequency of different causes of lower gastrointestinal bleed.

In my study, 43% patients were found to have hemorrhoids without any other pathology in the proximal colon. This finding is consistent with a study conducted in 2011 at Civil Hospital, Karachi; in which 22.8% had hemorrhoids.¹³ Similarly, 40.9% patients were found to have hemorrhoids in a study conducted at Nishtar Hospital Multan.¹⁴ All patients were screened by a full length colonoscopic examination to rule out neoplasia as a cause. Pregnancy and labour in females favor the development of hemorrhoids. Constipation is another contributing factor. Manzoor A also found that the most common cause of lower gastrointestinal bleed was hemorrhoids and even a higher percentage of 58% was observed.¹⁵

There a difference between the etiology of lower gastrointestinal bleed in Pakistan and western countries, where diverticular bleed accounts for upto 65% of acute lower gastrointestinal bleed.¹⁶ Factors such as high fibre diet reduce the risk of diverticular diseases in our population.

The next most common cause of lower gastrointestinal bleed on colonoscopy was macroscopic changes of ulcerative colitis, varying in severity from mild friable mucosa to severe pseudopolyps and extensive bleeding. Our study documented 19% patients with colitis and these were diagnosed as ulcerative colitis on biopsy. Ulcerative colitis is a pre-cancerous state that needs early diagnosis and screening colonoscopies starting 8 years after symptom onset.¹⁷

My study reported 14% patients with colorectal carcinoma. Colorectal carcinoma is strongly linked with smoking, heavy alcohol consumption and diet high in fats.¹⁸⁻²⁰ Colorectal carcinoma is strongly linked to the stage of disease at diagnosis, in general the earlier the diagnosis, the higher the chance of survival. Longstreth GF reported 17% of patients with lower gastrointestinal bleed having colorectal Carcinoma.²¹ Most patients with colorectal carcinomas present with symptoms of anemia and occult gastrointestinal bleed. Colonic polyps are slow growing overgrowths of colonic mucosa that carry a less than 1% chance of becoming malignant.

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In my study, 12% patients were found to have a single either sessile or pedunculated polyp mostly in the rectum. The majority of polyps are small, non-neoplastic lesions that are found during screening for lower gastrointestinal bleed. The main limitations of this study are small sample size, patient selection at a tertiary care hospital and only referred patients. Large multicentre prospective studies are required for generalization of these findings.

CONCLUSION

Colonoscopy is the standard procedure to determine the cause of lower gastrointestinal bleed. Although hemorrhoids and polyps are a common cause, nonetheless early diagnosis of colorectal carcinoma and inflammatory bowel disease can be made with colonoscopy of patients presenting with lower GI bleed.

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