Original Research

Evaluation of Clinical Profile of Chronic Lower Gastrointestinal Bleeding at a Tertiary Care Hospital

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Abstract

Background: Lower gastrointestinal bleeding (LGIB) is characterized as any hemorrhage occurring distal to the ligament of Treitz. This condition accounts for approximately 20% of all gastrointestinal bleeding (GIB) cases, The present study was conducted to evaluate clinical profile of chronic lower gastrointestinal bleeding.

Materials &Methods: A cohort of 50 patients aged between 30 and 70 years was assessed. Comprehensive demographic and clinical information were collected for each participant. Following a thorough physical examination and routine laboratory investigations, all patients underwent fibro-optic colonoscopy. This colonoscopic evaluation was conducted subsequent to appropriate bowel preparation. The bowel was cleansed using polyethylene glycol administered four hours prior to the procedure. Most patients exhibited effective bowel cleansing. Those who experienced insufficient bowel preparation during the initial examination were subjected to a repeat preparation using the same protocol. Histopathological analysis was conducted as needed for diagnostic clarification. All the results were recorded in Microsoft excel sheet and was subjected to statistical analysis using SPSS software.

Results: A total of 100 patients were assessed in this study. The average age of the participants was 41.6 years, with 62% identified as male. Additionally, 65% of the patients resided in urban areas. Painless bleeding, Painful bleeding, Stool with occult blood positive, Stool mixed with blood, Anemia, Blood transfusion needed and Pain abdomen was seen in 79 percent, 39 percent, 5 percent, 2 percent, 46 percent, 9 percent and 31 percent of the patients respectively. Hemorrhoids, Ulcerative colitis/ crohn's disease, Carcinoma colon, Infective etiology and Non-specific colitis was found to be present as etiologic profile in 25 percent, 22 percent, 21 percent, 17 percent and 15 percent of the patients respectively.

Conclusion: LGIB is a relatively frequent clinical manifestation observed in numerous patients experiencing intestinal hemorrhage, primarily affecting a younger demographic. The clinical range of LGIB is diverse, and colonoscopy is regarded as the preferred initial diagnostic procedure, offering a substantial diagnostic yield.

Key words: Lower Gastrointestinal bleeding, Colonoscopic

INTRODUCTION

Lower gastrointestinal bleeding (LGIB) is characterized as any hemorrhage occurring distal to the ligament of Treitz. This condition accounts for approximately 20% of all gastrointestinal bleeding (GIB) cases, making it essential to exclude the possibility of an upper GIB as the source. The annual incidence of LGIB is reported to be between 20.5 and 27 cases per 100,000 adults, with hospital admissions ranging from 21 to 40 cases per 100,000 adults. The overall mortality rate associated with LGIB is estimated to be between 2% and 4%. This condition is more prevalent among older individuals, typically within the age range of 63 to 77 years. A significant proportion of LGIB cases, approximately 90-95%, originate from the colon and anus, while only about 5 to 10% arise from the small intestine. The presentation of GIB can be chronic, leading to a more

insidious onset. Patients experiencing chronic blood loss may exhibit symptoms such as anemia or hematochezia, which may not elicit significant concern from either the patient or the healthcare provider. In contrast, acute LGIB is often marked by symptoms such as melena, visible blood per rectum, and hemodynamic instability, frequently necessitating hospitalization and potential resuscitation or transfusion to stabilize vital signs.[1- 3]

Timely endoscopy is recommended to be conducted within 24 hours of the initial presentation of acute lower gastrointestinal bleeding, whenever feasible. Treatment options during colonoscopy may involve techniques such as injection therapy, laser coagulation, electrocautery, and the use of a heater probe. Supportive treatments may include intravenous fluids, blood transfusions, and vasoconstrictor agents; however, the specific management approach should be tailored to the underlying cause of the bleeding. In cases where patients experience persistent or recurrent bleeding, surgical intervention may be necessary.[4- 6] Hence; the present study was conducted to evaluate clinical profile of chronic lower gastrointestinal bleeding.

MATERIALS & METHODS

The present study was conducted to evaluate clinical profile of chronic lower gastrointestinal bleeding. A cohort of 50 patients aged between 30 and 70 years was assessed. Comprehensive demographic and clinical information were collected for each participant. Following a thorough physical examination and routine laboratory investigations, all patients underwent fibro-optic colonoscopy. This colonoscopic evaluation was conducted subsequent to appropriate bowel preparation. The bowel was cleansed using polyethylene glycol administered four hours prior to the procedure. Most patients exhibited effective bowel cleansing. Those who experienced insufficient bowel preparation during the initial examination were subjected to a repeat preparation using the same protocol. Histopathological analysis was conducted as needed for diagnostic clarification. All the results were recorded in Microsoft excel sheet and was subjected to statistical analysis using SPSS software.

RESULTS

A total of 100 patients were assessed in this study. The average age of the participants was 41.6 years, with 62% identified as male. Additionally, 65% of the patients resided in urban areas. Painless bleeding, Painful bleeding, Stool with occult blood positive, Stool mixed with blood, Anemia, Blood transfusion needed and Pain abdomen was seen in 79 percent, 39 percent, 5 percent, 2 percent, 46 percent, 9 percent and 31 percent of the patients respectively. Hemorrhoids, Ulcerative colitis/ crohn's disease, Carcinoma colon, Infective etiology and Non-specific colitis was found to be present as etiologic profile in 25 percent, 22 percent, 21 percent, 17 percent and 15 percent of the patients respectively.

Table 1: Demographic data

Demographic data	Number	Percentage
Mean age (years)	41.6 years	
Males	62	62
Females	38	38
Rural residence	65	65
Urban residence	35	35

Table 2: Clinical profile

Clinical profile	Number	Percentage
Painless bleeding	79	79
Painful bleeding	39	39
Stool with occult blood positive	5	5
Stool mixed with blood	2	2
Anemia	46	46
Blood transfusion needed	9	9
Pain abdomen	31	31

Table 3: Etiologic profile

Etiologic profile	Number	Percentage
Hemorrhoids	25	25
Ulcerative colitis and crohn's disease	22	22
Carcinoma colon	21	21
Infective etiology	17	17
Non-specific colitis	15	15

DISCUSSION

Colonic bleeding (or lower GI bleeding)—defined as that occurring from the colon, rectum, or anus, and presenting as either hematochezia (bright red blood, clots or burgundy stools) or melena—has an annual incidence of hospitalization of approximately 36/100,000 population, about half of that for upper GI bleeding. The rate of hospitalization is even higher in the elderly. Patients usually present with painless hematochezia and a decrease in hematocrit value, but without orthostasis. Although GI bleeding can be a result of benign pathology, life-threatening hemorrhage, varices, ulceration and malignant neoplasms need to be considered and carefully excluded. Given the wide range of underlying pathology and the differences in their appropriate diagnostic approach, it is crucial for clinicians to define the type of GI bleeding based on clinical presentation. Depending on the rate of blood loss, GI bleeding can manifest in several forms and can be classified as overt, occult or obscure. Overt GI bleeding, otherwise known as acute GI bleeding, is visible and can present in the form of hematemesis, "coffee-ground" emesis, melena, or hematochezia. Occult or chronic GI bleeding as a result of microscopic hemorrhage can present as Hemoccult-positive stools with or without iron deficiency anemia.[7- 9] Hence; the present study was conducted to evaluate clinical profile of chronic lower gastrointestinal bleeding.

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McGuire and Haynes reviewed the literature from 1956 to 1971 and found 473 cases of massive lower GI bleeding. More than three-fourths of patients were successfully treated nonoperatively with a 22% rebleeding rate but only a 3% mortality. One hundred and three of four hundred and seventy-three (22%) underwent operations, 28 of the 62 (45%) hemicolectomies rebled and nine of the 62 (15%) died. Only three of 34 (9%) patients undergoing subtotal colectomy died and none rebled. McGuire recently reviewed the natural history of 79 patients with 108 episodes of acute lower GI bleeding. Bleeding stopped spontaneously in 76% but 24% required emergency surgery. In the 66 patients with lower gastrointestinal bleeding who required no more than three units blood transfusion over a 24-hour period, 98.5% stopped spontaneously. When greater than three units were transfused in a 24-hourtime period, 25 of 42 (60%) patients needed emergency surgery. Patients with acute LGIB can demonstrate a decrease in hemoglobin as well as changes in hemodynamics (50%), orthostatic changes (30%), syncope (10%), or cardiovascular collapse (9%).[11]

CONCLUSION

LGIB is a relatively frequent clinical manifestation observed in numerous patients experiencing intestinal hemorrhage, primarily affecting a younger demographic. The clinical range of LGIB is diverse, and colonoscopy is regarded as the preferred initial diagnostic procedure, offering a substantial diagnostic yield.

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