



INCIDENCE OF CAUSES OF LOWER GASTRO INTESTINAL BLEED (LGI) – A PROSPECTIVE STUDY DONE AT GASTROENTEROLOGY DEPARTMENT IN KURNOOL MEDICAL COLLEGE, KURNOOL.

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AIM:

The aim of this prospective study for three years is to know the incidence of causes of lower gastrointestinal bleeding (LGIB) in our government hospital.

Introduction:

Gastrointestinal bleeding is a common problem, medical practitioners encounter in the emergency department and in the primary care setting. LGI bleeding generally signifies bleeding from the colon or anorectum. The annual incidence of LGI bleed is approximately 20 cases /1,00,000 population, with an increased risk in older adults¹. Patients usually present with painless hematochezia and a decrease in the hematocrit value but without orthostasis. Patients with LGI bleeding should be resuscitated medically. In early reports, urgent colonoscopy resulted a diagnosis in approximately 70 % of cases^{2,3}. In subsequent reports, the combination of urgent colonoscopy and, if necessary, push enteroscopy, anoscopy, and capsule endoscopy has resulted in a diagnosis in 95 % of cases⁴.

Methods and materials:

All patients with fresh blood in the stool or per rectum and patients with melena whose endoscopy findings were normal were included in the study. All patients were either presented to gastroenterology out patient department or admitted to gastroenterology ward or referred from other departments in the same hospital. A total of 518 patients were evaluated for the cause of lower gastrointestinal bleeding from May 2015 to March 2018. After detailed history taking and physical examination patients were subjected to routine investigations. Apart from colonoscopy, endoscopic procedures such as esophagogastroduodenoscopy, wireless capsule endoscopy, push enteroscopy, and double-balloon enteroscopy, are used depending upon availability of these tests and clinical circumstances. In some patients CT scan abdomen was done. The clinical features, laboratory data and imaging findings were correlated to arrive at a diagnosis. The sequence of using various modalities depends on such factors as rate of bleeding, hemodynamic status of the patient, inability to localize bleeding with initial modality.

Results:

A total 518 of patients were evaluated for bleeding per rectum. Among these 288 were males and 230 were female. Age group range from 3 year to 88 years. The most common cause in our study for LGI bleeding was internal hemorrhoids, 218 patients (42.08%), rectal carcinoma 84(16.21%), rectal polyps 43 (8.30%), Radiation proctitis 42(8.10%), infectious colitis 39(7.52%), IBD 23(4.43%), solitary rectal ulcer syndrome 18(3.47%), anal fissure 14(2.70%), and ischemic colitis in 7(1.35%). In 30(5.79%) patients we could not establish the diagnosis. Data is presented in Table 1.

Table: 1

Age	Number of Patients		Total
	Male	Female	
<10 Y	14	10	24
11-20 Y	24	16	40
21-30 Y	26	32	58

31-40 Y	51	32	83
41-50 Y	53	36	89
51-60 Y	42	38	80
61-70 Y	34	30	64
71-80	27	23	50
>80 Y	17	13	30
Total	288	230	518

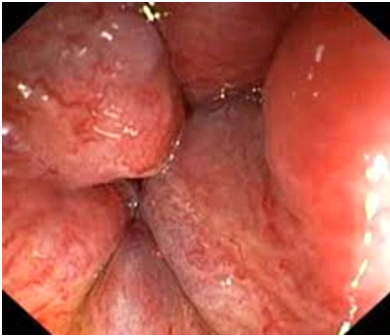
Causes of LGI bleeding in our study

1. Internal hemorrhoids 42.08%
2. Rectal carcinoma 16.21%
3. Rectal polyps 8.30%
4. Radiation proctitis 8.10%
5. Infectious colitis 7.52%
6. IBD 4.43%
7. SRUS 3.47%
8. Anal fissure 2.70%

Discussion:

Lower gastrointestinal bleeding is defined as bleeding that originates from a site distal to the ligament of Treitz⁵. Approximately 10% to 15% of patients presenting with acute severe hematochezia have an upper gastrointestinal source of bleeding identified on upper endoscopy. As with upper gastrointestinal bleeding, lower gastrointestinal bleeding ceases spontaneously in most cases. Colonoscopy should be performed first in most patients presenting with acute lower GI bleeding⁶. Urgent colonoscopy following bowel purge has been shown to be safe, provide important diagnostic information, and also therapeutic intervention. Urgent colonoscopy for LGI bleeding generally is performed 6 to 36 hours after the patient is admitted to the hospital. Because most bleeding stops spontaneously, colonoscopy often is performed semi-electively on the day after initial hospitalization to allow the patient to receive blood transfusions and the bowel preparation on the first day of hospitalization⁷. The overall rate of detecting a definite cause of LGI bleeding by colonoscopy ranges from 48% to 90 %, with an average of 68%, based on a review of 13 studies⁸. A prospective study revealed no difference between urgent and elective colonoscopy in terms of further bleeding, blood transfusions, hospital days⁹. Early colonoscopy has been associated with a shorter length of hospitalization, principally because of improved diagnostic yield rather than therapeutic intervention. Visualizing active bleeding during colonoscopy is not always possible, but colonoscopy permits identification of stigmata of recent hemorrhage and provides information on the location of the lesions and on risk stratification. Helical CT scanning as a diagnostic tool for acute lower GI bleeding is a safe, convenient, and an accurate diagnostic tool relative to mesenteric angiography and colonoscopy. CT angiography appears to be less invasive and have a higher diagnostic yield over DSA for the diagnosis of major obscure GI bleeding. Hemorrhoidal bleeding is characterized by bright red blood per rectum that can coat the outside of the stool, drops of blood into the toilet, and often appear as a large amount fresh blood in the toilet. It is usually mild, and self-limited. The diagnosis is usually made with anoscopy, sigmoidoscopy, or colonoscopy. Most patients with mild hemorrhoidal bleeding respond

to medical therapy, those with severe or recurrent bleeding are likely to require some form of endoscopic or surgical treatment. Patients with anal fissure present with painful defaecation and can sometimes present with hematochezia. Treatment aims at healing of fissure rather than using hemostatic methods. Post polypectomy bleed occurs in 1% of colonoscopic polypectomies. It can occur after 5 to 7 days of polypectomy. Risk factors for post polypectomy are large polyp size (>2 cm), thick stalk, sessile polyp and right side location. This problem is usually treated with hemoclip application which do not cause tissue damage. Patients with polyps and cancer can present with hematochezia. More frequently these patients present with occult blood loss with iron deficiency anaemia. Colonic polyps can be removed colonoscopically. Chronic radiation effects occur 6 to 18 months after completion of treatment and manifest as bright red blood with bowel movements. The injury is due to vascular damage, with subsequent mucosal ischemia, thickening and ulceration. The damage is due to chronic hypoxic ischemia and oxidative stress. Colonoscopy reveals telangiectasias, friability, and sometimes ulceration in the rectum. It is treated with topical sucralfate enemas and sometimes Argon plasma coagulation is necessary to achieve good hemostasis. Antioxidant vitamins like vitamins E and C, have been reported to decrease bleeding from chronic radiation proctitis¹⁰. Severe bleeding may be caused by Inflammatory bowel disease, Ischemic colitis, and infectious colitis. In IBD and Ischemic colitis, diagnosis is made by colonoscopy. The features are friability, erythema, exudates, and ulcerations.



Pic: Internal Hemorrhoids.

Conclusion:

1. Most common cause of LGI bleeding is internal hemorrhoids
2. Colonoscopy is most common modality of investigation to know the cause
3. In 5.79% cases we could not establish the diagnosis due to lack of other investigations like enteroscopy, radionuclide scan or DSA etc.

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