

**Original Research Paper** 

**General surgery** 

# A Study on Lower Gastrointestinal Bleed

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	study aims at studying various causes and presentations of lower GI bleed and to emphasise the importance of proscopy as a diagnostic tool in Lower GI bleed. Patients were subjected to digital rectal examination, proctoscopic

examination, laboratory studies and colonoscopy. In this study, the commonest cause of Lower GI bleed was Haemorrhoids, followed by colitis. Colorectal lesions forms the next common cause of lower GI bleed. There were no cases of small bowel lesions recorded. The incidence of lower GI bleed was higher in males and most patients were in 30 – 50 years age group. Carcinoma rectum was the most common colorectal malignancy.

## KEYWORDS : Carcinoma rectum, Colonoscopy, hemorrhoids, Lower gastrointestinal bleeding (LGIB)

## INTRODUCTION

Lower gastrointestinal bleeding (LGIB) is defined as a bleeding source below the ligament of Trietz. LGIB usually causes hematochezia, or bright red blood per rectum. Most acute LGIB stops spontaneously. Despite the fact that bleeding per rectum is a common complaint in day to day practice, this study elaborates that every attempt should be made to diagnose the underlying cause of lower GI bleed and treat at an early stage.

During recent years, Colonoscopy has emerged as the diagnostic and therapeutic procedure of choice and should be performed in every case of lower GI bleed. The etiology of Lower GI bleed and causes are varied and it is necessary to study the whole lower GI tract so that a right cause is not missed.

### AIM OF THE STUDY

1. To study about the various causes of lower GI bleed.

2. To study about the various clinical presentations of lower GI bleed.

3. To emphasize the importance of colonoscopic evaluation as an initial investigating modality to find the cause of bleed, and also as therapeutic choice.

4. To study about the various treatment modalities in the management of lower GI bleed.

### MATERIALS AND METHODS

This is a prospective study conducted at Coimbatore Medical College Hospital, Coimbatore during the period 2007-2013. The study group consisted of 150 cases of lower gastrointestinal bleed who attended the Surgical department with complaints of bleeding per rectum. The study group included both male and female patients above 15 years of age.

These patients were evaluated by thorough history, clinical examination including digital examination of rectum, proctoscopy, laboratory including complete haemogram, blood urea, sugar, creatinine, LFT, Blood grouping & typing, bleeding time & clotting time. Stool for ova, cysts, Skiagrams of chest, barium enema, Ultrasonogram of abdomen, upper Gl scopy & CT abdomen were taken where ever necessary.

All patients were subjected to colonoscopy. Those patients who were not willing for colonoscopy were excluded from the study. The cause of lower GI bleed was diagnosed and managed accordingly.

### **RESULTS:**

A total number of 150 cases with lower GI bleed who attended our institution and for whom colonoscopy was done were included in the study during the period from 2007 to 2013 and the following results were obtained.

### DISEASE PREVALENCE OF LOWER GI BLEED:

Disease	No. of cases	%
Haemorrhoids	82	54.7
Fissure in ano	22	14.7
Colorectal carcinoma	16	10.7
Amoebic colitis	12	8
Non specific colitis	6	4
Ulcerative colitis	4	2.7
Rectalcarcinoma with haemorrhoids	2	1.3
Intussusception	2	1.3
Polyps	2	1.3
Crohns	2	1.3
Total	150	100

## AGE INCIDENCE OF LOWER GI BLEED

Age group in years	Number of cases	%
15-20	1	1.3
21-30	2	2.7
31-40	28	37.4
41-50	19	25.3
51-60	16	21.3
61-70	8	10.7
71-80	1	1.3
81-90	0	0
>90	0	0
Total	75	100

#### SYMPTOMATIC PRESENTATION OF BLEEDING PR

Out of 150 cases presented with bleeding PR, 47 had only bleeding, 52 cases presented with mass descending PR, 14 patients had altered bowel habits, 26 cases presented with loss of weight, 9 patients had tenesmus, and 2 presented with intestinal obstruction.

#### SEX INCIDENCE

Lower GI Bleed was more common in males when compared to females, male: female ratio was 1.78: 1.

#### DISCUSSION:

In our study, haemorrhoids forms the most common cause of lower GI bleed. The patients with haemorrhoids, presented with different degrees, with or without constipation and perianal itching. Most of them presented with III<sup>rd</sup> degree haemorroids..

Out of the 18 patients with colorectal carcinomas, 10 patients were diagnosed as rectal carcinoma (out of the 10 patients with Rectal carcinoma,2 patients had rectal carcinoma with haemorrhoids), 4 patients had Carcinoma sigmoid colon, & 2 patients were diagnosed as Carcinoma Descending colon & Hepatic flexure.

All patients with colorectal carcinomas presented with complaints of passing bright- red bleeding per rectum, with or without alteration in bowel habits, weight loss or tenesmus.

Diagnostic Colonoscopy was performed for all cases and biopsy was taken in all the patients. Histologically our series of colorectal cancers were found to be Adenocarcinoma.

Two patients with carcinoma sigmoid colon presented with obstruction and was taken up for emergency laparotomy.

Left sided colonic tumors were more common than the right. Rectal carcinomas were the most common site of colonic tumors.

Out of the 18 patients with colorectal carcinoma, only 6 cases were diagnosed by digital rectal examination and other 12 cases could be diagnosed only by Colonoscopy.

Out of the 18 cases of colorectal carcinoma 2 patients were diagnosed as rectal adenocarcinoma with haemorrhoids, which was diagnosed only by Colonoscopy and was surgically treated.

Thus this study emphasizes the importance of Colonoscopy which is used as a diagnostic device for early diagnosis of colonic carcinomas in patients presenting with lower GI bleed.

In this study, out of 150 patients, 98 patients underwent surgery, and the rest 52 patients were managed conservatively with symptomatic treatment.

Out of 82 patients with haemorrhoids, 52 patients underwent haemorrhoidectomy.4 patients with second degree haemorrhoids underwent banding, and 4 patients with first degree haemorrhoids underwent sclerotherapy & rest 22 patients in both first and second degrees were managed conservatively with symptomatic treatment.

Out of the 22 patients with chronic fissure in ano, 6 patients under went Closed lateral anal sphincterotomy, 10 patients underwent Open lateral anal sphincterotomy and the rest 6 patients were managed conservatively with symptomatic treatment.

Out of the 18 patients with Colorectal adenocarcinoma, 10 patients were diagnosed as rectal carcinoma, out of which 5 patients under went abdominoperineal resection with permanent end colostomy and 3 patients underwent anterior resection. 2 patients with rectal carcinoma were unresectable and were proceeded with Hartman's procedure and all the patients were followed up with adjuvant chemo radiation.2 cycles of chemotherapy followed by RT then followed by chemotherapy.

Out of 4 patients with Carcinoma sigmoid colon, 2 underwent Anterior resection and the 2 patients who presented with intestinal obstruction, was taken up for emergency laparotomy and underwent

# VARIOUS TREATMENT MODALITIES FOR LOWER GI BLEEDING

Name of disease	No: of cas- es	Medical treat- ment	Sur- gery	Type of surgery& No: of cases
Haemor- rhoids	82	22	60	Haemorroidectomy- 52 Banding- 4 Sclerotherapy- 4
Fissure in ano	22	6	16	Lateral anal sphincterotomy (open -10, closed -6)

Ca Rectum	10	-	10	APR-5, AR-3, Hartman's-2
Ca Sig- moid	4	-	4	AR – 2, Hartman's - 2
Ca de- scending colon	2	-	2	Left hemicolectomy-2
Ca hepatic flexure	2	-	2	Extended ( Rt) Hemicolecto- my - 2
Rectal Polyp	2	-	2	Polypectomy-2
Intussus- ception	2	-	2	Resection anastomosis-2
Colitis	24	24	-	
TOTAL	150	52	98	

Hartman's procedure and were followed up with adjuvant chemotherapy.

2 patients with Adenocarcinoma descending colon underwent left hemicolectomy and 2 patients with Adenocarcinoma hepatic flexure underwent Extended right hemicolectomy and were followed up with adjuvant chemotherapy.

Thus all cases of colonic adenocarcinoma underwent surgical resection of tumor or Hartman's procedure and were followed up with adjuvant chemotherapy or chemoradiation.

Thus this study emphasizes that, for colorectal carcinomas surgery (curative resection) remains the main modality of treatment. Chemotherapy and radiotherapy are only adjuvant therapies.

2 patients diagnosed as rectal polyp underwent polypectomy and biopsy was proved as non- neoplastic polyp.

## CONCLUSION

1. In this study, the commonest cause of Lower GI bleed was Haemorrhoids, followed by colitis.

2. Colorectal lesions forms the next common cause of lower GI bleed. There were no cases of small bowel lesions recorded.

3. The incidence of lower GI bleed was higher in males and most patients were in 30 – 50 years age group.

4. Carcinoma rectum was the most common colorectal malignancy. Out of 18 cases of colorectal malignancies, 12 were diagnosed only by Colonoscopy, out of which 2 cases presented along with haemorrhoids.This indicates the need for colonoscopy in all patients presenting with haemorrhoids and fissure. **Colonoscopy is the diagnostic procedure of choice in patients presenting with Lower Gl bleed. It can also be used as therapeutic device.** 

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