# **Profile of Colonoscopy Findings: A single Centre Experience**

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#### **ABSTRACT**

**Background:** About 30% of patients presenting to surgical outpatient department has lower gastrointestinal (LGI) symptoms. Colonoscopy is a low risk and at the same time investigation of choice in these patients which allows visualization of the entire colon and the terminal portion of ileum. This study was done to evaluate the role of colonoscopy.

**Methods:** This was an observational, hospital based study from February 2014 to March 2018, carried out at Nepalgunj Medical College and Teaching Hospital.

**Results:** 245 patients underwent colonoscopy, among them 62.85% were male and 37.14% were female with the M:F ratio being 1.6:1. The youngest patient undergoing colonoscopy was 21 and the eldest was 78 with the mean age being 53.6±12. The common indications were per rectal bleeding (49.38%), alteration in bowel habit (40.49%), and constipation (13.46%). In 85.71% patients entire large bowel could be visualized. In 21.22% no abnormality was detected. Haemorrhoids (27.34%) were the most common findings and then nonspecific inflammatory bowel diseases (17.55%), colorectal polyps (15.51%) and colorectal cancers (14.28%). Biopsy was done in 39.51% patients and the most common finding was nonspecific inflammatory bowel disease, 36.08% had adenocarcinomas and rest had ulcerative colitis, juvenile and hamartomatous polyps.

Conclusion: Colonoscopy is a safe and effective investigation in diagnosing as well as managing the patients with LGI symptoms.

Key words: Colonoscopy, bleeding per rectum, haemorrhoids, biopsy

### **INTRODUCTION**

Lower gastrointestinal (LGI) diseases cause lot of morbidity and mortality. Colonoscopy plays a vital role in screening, diagnosis and treatment of these conditions. In Nepal, like in other developing countries, this facility is rarely available. Colonoscopy allows visualization of the entire large bowel and a part of the terminal ileum making the diagnosis easier and also provides added advantage of taking a specimen for biopsy. The indications of colonoscopy are LGI bleeding, alteration in bowel habit and suspicion of malignancy<sup>1</sup>.

Fecal occult blood is a simple and quick test for the presence of blood in stool. A positive test is a strong indication for

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colonoscopy<sup>2</sup>. Detection of polyp is not an infrequent finding and polypectomy is a routine part of colonoscopy<sup>3</sup>. This study was carried out to evaluate the role of colonoscopy in patients presenting with LGI symptoms

# **MATERIALS AND METHODS**

It was an observational, hospital based study from February 2014 to March 2018, carried out at Nepalgunj Medical College and Teaching Hospital, department of surgery. All patients who underwent colonoscopy were included. Patients below 18 years age and patients with severe cardiopulmonary disease were excluded. Informed consent was taken from the patients and ethical clearance was also taken from the ethical board. Bowel preparation was done with polyethelene glycol. Colonoscopy was done without sedation. Sedation was given only when needed. The procedure was performed using a fibreoptic video colonoscope (Fujinon).

## **RESULTS**

245 patients underwent colonoscopy for various LGI symptoms during the study period. There were 154 (62.85%) males and 91 (37.14%) females with the male to female ratio (M:F) of 1.6:1. The age ranged from 21 to 78 with the mean age of 53.6  $\pm$ 12. The most common indication was per rectal bleeding followed by recent alteration in bowel habit (Table I).

189 (77.14%) patients underwent the procedure without sedation but in remaining 56 (22.85%) patients sedation was required. In 210 (85.71%) patients the entire large bowel up to the ceacum was visualized. In 35 (14.28%) patients ceacum couldnot be reached. This was mostly because of the constricting malignant growth in the caecum and the rectum and in few of the cases because of the poor bowel preparartion.

Indications	n (%)
Per rectal bleeding	121 (49.38%)
Altered bowel habit	49 (40.49%)
Constipation	33 (13.46%)
Chronic diarrhoea	13 (5.30%)
Lower abdominal pain	13 (5.30%)
Anemia for evaluation	9 (3.67%)
Abdominal mass	7 (2.85%)

Table I: Indications for colonoscopy

Haemorrhoids were the most common findings (27.34%), followed by nonspecific proctocolitis and colitis (Figure 1)

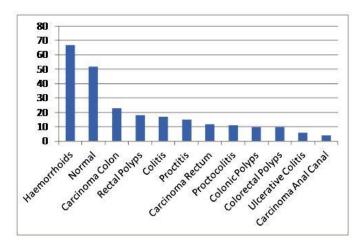


Figure 1: Colonoscopy findings

In 97 (39.51%) patients biopsy was done for histopathological examination. The findings of histopathological examinations are listed in Table 2. None of the patients had complication.

Histological findings	n (%)
Nonspecific inflammatory bowel disease	47 (48.45%)
Adenocarcinima	35 (36.08%)
Ulcerative colitis	6 (6.18%)
Juvenile polyp	4 (4.12%)
Squamous cell carcinoma	3 (3.09%)
Hamartomatous polyps	2 (2.06%)

**Table II: Histological findings** 

### **DISCUSSION**

Colonoscopy is the investigation of choice in the diagnosis of the disease affecting the colon and rectum. The most common indication for colonoscopy was per rectal bleeding followed by alteration in bowel habit and constipation. There was a male dominance which is in consistency with other studies<sup>4</sup>. The mean age in this study was 53.6. The relatively younger age group may be explained by the commonest findings being haemorrhoids which occur commonly after the fifth decade of life<sup>5</sup>. The colonoscopy was normal in 52 (21.22%). The rate of normal findings were higher in the beginning when it was started and with time started decreasing which may be due to improvement in patients selection. Other similar studies also showed same data<sup>6</sup>.

The most common finding was haemorrhoids, followed by nonspecific inflammatory bowel disease, colorectal polyps and colorectal carcinomas. The prevalence of haemorrhoids was similar to other studies<sup>6, 7</sup>. The second common finding was nonspecific inflammatory bowel disease. Many of them were of infective etiology and resolved with antibiotics, antiamoebic and antihelminthics.

The occurrence of colorectal polyps is generally thought to be lower in this part of the world and in this series the colorectal polyps were third common finding commonly found in younger patients. We found a prevalence of 15.51% which is in consistent with other studies<sup>8</sup>. All of them were less than five in numbers and none showed any morphologic or histologic characteristics of any syndromic colorectal diseases. The incidence of colorectal cancer in Nepal is uncertain. In our study it was found to be in 14.28% patients. Five in one thousand undergoing colonoscopy have serious complications, most common being the perforation<sup>9</sup>. There were no complications recorded in this study.

### CONCLUSION

Colonoscopy is an important modality of investigation in patients with LGI symptoms. The diagnostic yield is significant with an added advantage of biopsy and therapeutic intervention like polypectomy, provided facilities and expertise are available.

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