Dr. Hitesh Chitroda¹, Dr.Samir Shah², Dr.Firduas Dekhaiya³, Dr.Bhavesh Astik⁴, Dr.Sandip Parmar⁵

ABSTRACT:

Background: Colo-rectal disorders mainly consist of ulcerative colitis, Crohn's colitis, malignancy, polyp, Diverticular disease, stricture, tuberculosis hemorrhoids, anal fistula, and fissure. Now a Days introduction of ultrasound and color Doppler with colonoscopy and virtual colonoscopy increases the diagnostic as well as therapeutic value.

Aims and Objectives: Study the commonly encountered cases of colo-rectal disorders and their management and regular follow-up. To predict the prognosis, to do colonoscopy guided biopsy for detecting of colorectal carcinoma and a screening tool for every patient of age more than >50 years.

Materials and Methods: We have selected 100 patients had acomplain of abdominal pain, discharge in stool, constipation, diarrhea and screening of known case of inflammatory bowel disease and malignancy. Pre operative bowel preparation was done.

Results: Male (58%) are more affected than female (42%) in colorectal disorders. During colonoscopy 55% patients having normal colonoscopy finding, 30% having colitis, 7% having malignancy, 4% having a polyp.

Conclusion: Colonoscopy has very useful diagnostic and therapeutic advantages in detecting and treating colonic pathologies.

Keywords: Colonoscopy, colorectal disorder

¹Senior Resident, ² Professor & Head, ³ Associate Professor, ⁵ Second year resident

Department of surgery, Govt. medical College & Sir T hospital, Bhavnagar, Gujarat (India)

⁴Associate Professor, Skin & Vd, Govt. medical College & Sir T hospital, Bhavnagar, Gujarat (India)

eISSN: 2319 - 1090

Corresponding author mail: shah.samir@rediffmail.com

Conflict of interest: Nil

Original article:

A Prospective Study of 100 Case of Colonoscopic finding in a Patients of Colorectal Disorder

Dr.Hitesh Chitroda et al.

INTRODUCTION

Colo-rectal disorders mainly consist of ulcerative colitis. Crohn's colitis. malignancy, polyp, Diverticular disease, stricture, tuberculosis hemorrhoids, anal fistula, and fissure. [1] Hemorrhoids are one of the most common colorectal ailments. Diagnosis of colorectal disorders done with history, physical examination, digital rectal examination and Proctoscopy, barium enema, CT SCAN of abdomen with contrast, Sigmoidoscopy and colonoscopy. Colonoscopy is useful in diagnostic and therapeutic as well as in screening tool. Now a Days introduction of ultrasound and color Doppler with colonoscopy and virtual colonoscopy increases the diagnostic as well as therapeutic value. [2]

MATERIALS AND METHODS

In this study, we collect the data of 100 patient of colonoscopy study in a patient of colo-rectal disorders. We take the patient complain of abdominal pain, bleeding per rectum, pus discharged in stool, mucus discharged in stool, chronic constipation, chronic diarrhea, abdominal distention, family history of colonic malignancy, known case of ulcerative colitis and crohn's colitis

and impacted foreign body in colon treated in our hospital sir thakhtsinhji general hospital and govt. Medical college bhavnagar during the period of august 2011 to august 2013. We selected the patients and underwent for colonoscopy. The interval between the treatment and review was 2months. Regular screening of patient who is a known case of ulcerative colitis, crohn's disease, strong family history and colonic malignancy, colonoscopy done every 6months.

Once the patients were selected, written and informed consent of patient and their relatives were obtained .Pre operative bowel preparation was done (sodium pico sulfate). The patient's relatives were explained about the follow up periods and the address and contact numbers of the patient's relative were recorded. They were then interviewed for detailed clinical history and physical examination was carried out. Patients were then subjected to investigations according to Profoma. Then patient the underwent colonoscopy.

SELECTION CRITERIA: Age: 20-70 Years, patient complain of mucus discharge in stool, pus in stool, chronic constipation, bleeding per rectum, chronic diarrhea.

Dr.Hitesh Chitroda et al.

Regular screening and follow up in known case of Inflammatory bowel disease and family history of colorectal carcinoma and polyps.

PROCEDURE:

<u>Position</u>: Every patient was kept in left lateral position with right leg flexed at knee & left leg extended.

Anesthesia: sedation was given as inj. Midazolam 0.02-0.03 mg iv stat. But sometimes short G.A. was required to the patient.

Colonoscope was lubricated with lignocaine 2% jelly & inserted into the anus. The Tip of the Colonoscope was held and introduced by the operator or the assistant while the operators hold the handle in his left hand. Gradually Colonoscope was inserted into the colon keeping the lumen of the colon in the center of the monitor. Then by inflating the air and aspirating the colonic contents the Colonoscope was gently guided further into the colon up to the caecum. There after it was withdrawn keeping the center of the lumen in the center of the monitor and the mucosa was visualized in the monitor. Any associated procedure was done. Gently the Colonoscope was removed from the rectum and anus and

the procedure was completed. Colonoscopy is a procedure which includes mainly lowers gastrointestinal endoscopy procedure. Initially majority of examination rule out performed to Recto-sigmoid Neoplasia in an asymptomatic patients. The American cancer society, The national cancer institute recommended that every person over 50 year of age undergo annual fecal occultblood tests and colonoscopy screening every year. After the completion of procedure patient was kept in observation, and watched for any iatrogenic injury. All patients were called for follow up in the outpatient department after 15 days, 1 month, 2 months.

RESULTS AND DISSCUTION

The study was conducted over a period of 2 years and following observations were recorded. Various Studies have been done in colonoscopic finding and I have compared my study (group A) with MD Abu Sayeed and Rabiul Islam study (group B). The goal of this study was to analyze the colonoscopic findings, presenting symptoms of colorectal disorders and complications of colonoscopy and assessing the benefits of colonoscopy as a diagnostic as well as therapeutic procedure.

Dr.Hitesh Chitroda et al.

Table 1: Group A sex related distribution of colorectal disease

SR.NO.	COLO-RECTAL DISEASE	MALE (58%)	FEMALE (42%)
1	Colitis	09(35%)	06(32%)
2	Carcinoma of colon	05(19%)	03(16%)
3	Other colorectal disease	08(31%)	09(47%)
4	Polyp	03(11%)	01(5%)
5	Foreign body	01(4%)	00(0%)

Males (58%) are more affected than females (42%) in colorectal disorders. In males 35% had colitis, 19% was diagnosed carcinoma colon, 31% other colorectal disorders like hemorrhoids, fissure and fistula, 11% were having polyp and 4% foreign body in colon cases were reported. In females 32% with colitis,16% with carcinoma of colon, 47% with other colorectal disorders and 5% with polyp were diagnosed. Colitis was more common in males than females, while other colorectal disease were more common on females.

Table 2: Colonoscopy diagnosed colorectal disorders

SR.NO.	DISEASE	GROUP A (%)	GROUP B (%)	P VALUE	DF,CHI SQURE	INFERENCE
Ort.ivo.						
1	Normal Scopy	55	48	0.161	1,0.980	Not significant
2	Colitis	15	04	0.004	1,7.037	Significant
3	Colon carcinoma	07	08	0.007	1,6.380	significant
4	Other colorectal	18	28	0.0465	1,2.823	significant
	disease(Hemorrh	\ , \				
	oids, fissure,					
	fistula)					
5	Polyp	04	23	0.0001	1,15.45	significant
6	Foreign body in	01	03	0.1562	1,1.020	Not significant
	colon					

It was seen that during colonoscopy various Colo-rectal disorders were seen in both the groups. This data was statistically analyzed by the application of Chi-Square test. For these parameters p value (p <0.05) is

significant, it means that data was significantly associated.55% of the patients had normal colonoscopy in Group A while in group B there were 48% cases with normal

Dr.Hitesh Chitroda et al.

colonoscopy, means that these patients had normal colon grossly.[3]

Among both groups 15% patients were having colitis including ulcerative colitis, crohn's colitis In group Awhile in group B was 4%. Colon carcinoma was more in Group B as compared to group A. Due to colonoscopy early diagnosis and treatment of colon carcinoma was possible. Regular screening in a suspected patient and patient having positive family history reduced the morbidity and mortality associated with colon carcinoma.[4]

By colonoscopy 23% patients in group B were diagnosed as polyp in colon, while in group A only 4% were having polyp and were confirmed benign or malignant by taking biopsy. Later on Polypectomy was done by colonoscopy. In Group B 23 % of the patients were diagnosed polyps in colon

and among them 68% patients undergone polypectomy by colonoscopy. [5]

In group B 28% patients were diagnosed with other colo-rectal disorders like Hemorrhoids, worm infestation, fissure, and Peri anal fistula after colonoscopy while in group A only18%. In both groups most of the patients diagnosed Hemorrhoids. Worm infestation was more in group B. [6]

Colonoscopic removal of Foreign body done in 3% of the patients in group B while only one patient in group A. Successfully foreign body was removed in Group B without any other therapeutic intervention, while in group A foreign body induced colon perforation was seen and later on was treated by Laparotomy.

Table 3: Symptoms related distribution:

SR.NO.	SYMPTOMS	GROUP A(%)	GROUP B	Р	DF,CHI	INFERENCE
			(%)	VALUE	SQURE	
1	Abdominal pain	70	33	0.001	1,27.40	Significant
2	Discharged Per rectum (blood, mucus, pus)	51	35	0.011	1,5.222	Significant
3	Alteration in frequency of stool	40	17	0.0002	1,12.980	Significant
4	Painful defection	30	13	0.0032	1,7.459	Significant
5	Foreign body	01	1	0.5	1,00	Not Significant
6	Anemia	08	1	0.0085	1,5.701	Not Significant

It was seen that colonoscopy was done for various symptoms seen in both the Groups. This data was statistically analyzed by the application of Chi-Square test. For these parameters the p value (p < 0.05) is significant, it means that data significantly associated.70% patients were in group A and 33% of the patient in Group B having abdominal pain, undergone colonoscopy. In group A 60% had normal colonoscopy, 20% were having colitis, 5% with carcinoma of colon,10% were diagnosed other colo-rectal disorders like hemorrhoids, fissure, and perianal fistula, 2% had polyp and 3% having foreign body in colon while in group B 69% were having normal colonoscopy, 10% had colitis, 3% having carcinoma of colon, 10% with other colorectal disorders, 13% had polyp and 5% patient were having foreign body in colon.[3]

GROUP A

51% patient in group A and 35% patient in group B having blood, mucus or pus discharged per rectum, undergone colonoscopy. In group A 54% were having normal colonoscopy, 13% had colitis, 3% of the patient were having carcinoma of colon, 30% with other colo-rectal disorders like

hemorrhoids, fissure, and Perianal fistula, while in group B 49% had normal colonoscopy, 14% were having colitis, 5% diagnosed as carcinoma of colon, 31% had other colo-rectal disorders and 1% having foreign body in colon. [7]

40% patient of group A and 17% patient of group B were having alteration in stool frequency, undergone colonoscopy. In group A 42% had normal colonoscopy,

12% with colitis, 3% had carcinoma of colon, 41% were having other colo-rectal disorders like hemorrhoids, fissure, and Peri anal fistula and 2% having foreign body, while in group B 39% had normal colonoscopy, 10% were having colitis,4% diagnosed carcinoma of colon, 44% had other colo-rectal disorders and 3% had foreign body in colon.

Group A 30% of the patient and group B 13% patient were having painful defection, undergone colonoscopy. In group A 29% had normal colonoscopy 3% were having colitis, 3% diagnosed as carcinoma of colon, 65% had other colo-rectal disorders like hemorrhoids, fissure, and Peri anal fistula, while in Group B 30% had normal colonoscopy, 2% were having colitis, 5% of the patient having carcinoma of colon, 60%

Dr.Hitesh Chitroda et al.

had other colo-rectal disorders and 3% were

having foreign body in colon. [4].

Table 4: Colonoscopic Finding

SR.NO	FINDING	GROUP A (%)	GROUP B (%)	P VALUE	DF,CHI- SQUARE	INFERENCE
1	Normal	55	48	0.1610	1,3.09	Not
						Significant
2	Mucosal	20	11	0.0393	1,3.09	Significant
	ulceration					
3	Inflammation	10	04	0.048	1,2.76	Significant
4	Polyp	04	23	0.0001	1,15.45	Significant
5	Stricture	03	03	0.5	1,00	Not Significant
6	Mass	07	08	0.3942	1,0.720	Not Significant
	(malignancy)					
7	Foreign body	01	03	0.156	1,1.020	NotSigniicant

Various findings during colonoscopy were observed in both the groups. This data was statistically analyzed by the application of Chi-Square test. For these parameters the p value (P<0.05) was significant, it means that data was significantly associated. In group A 55% patients were having normal colonoscopy while in group B 48% patients were having normal colonoscopy.

In both groups mucosal ulceration, inflammation was seen in large number of the patients during colonoscopy. Mass and polyps were more in group B 8% and 23% as compared to group A were having 7% and 4%. During colonoscopy stricture was found in both the groups in equal distribution. Foreign body in colon was more in group B as compared to group A.

Table 5: Immediate Post Operative Period

SR.NO.	COMPLICATION	GROUP A (%)	GROUP B (%)	P VALUE	DF,CHI SQURE	INFERENCE
1	Abdominal discomfort (bloating)	28	40	0.036	1,3.209	Not Significant
2	Hemorrhage	01	04	0.08	1,1.89	Significant
3	colon perforation	01	00	NA	NA	NA
4	Perianal region pain	03	05	0.230	1,0.520	Not significant

Dr.Hitesh Chitroda et al.

After colonoscopy 28% patients developed abdominal discomfort (bloating), 3% patient were having peri anal pain, 1patient reported with hemorrhage and 1 patient was diagnosed colonic perforation due to foreign body impaction.[8, 9] After 15 days, 1 month and 2 months follow-up no any complication was Reported in any patient after colonoscopy.

SUMMARY AND CONCLUSION

Pre-operative prior preparations to Colonoscopy, Procedure of colonoscopy was reviewed and discussed. Colorectal disorders were more common in males (58%) than females (42%) and 60% of the patients were within 20-50 years of age group.55% patients were having normal colonoscopic finding ,15% patient were diagnosed colitis ,8% patients came up with colon Carcinoma, 17% patients diagnosed as other colorectal disease like hemorrhoids, fissure, fistula polyp was present in 4% cases and in 1 case foreign body was detected. Most common findings during colonoscopy were mucosal ulceration and inflamed colon. During colonoscopy 40% of the patients who presented with abdominal pain were diagnosed as Colorectal dis-orders. Patients who presented with discharged per rectum

46% patients among them were diagnosed by colonoscopy. So colonoscopy is useful diagnostic procedure in colonic Pathology. Abdominal discomfort (bloating) was seen in 28% patients after colonoscopy and were managed conservatively without any intervention, 3% patients werer eported with peri anal pain and 1% patient developed colonic perforation due to foreign body in colon. Colonoscopy was useful in taking a biopsy of polyp or mass and also therapeutic For Polypectomy and in 1% patient for removal of foreign body. Colonoscopy has very useful diagnostic and therapeutic advantages in dectecting and treating colonic pathologies.

REFERENCES:

- 1. Sabiston textbook of surgery 19th edition volume 2; section10;52:1296 1298
- 2. Maingot's Abdominal Operation 17th edition section 1; 3: 35-70
- 3. Berkowitz I, Kaplan m. indications for colonoscopy. An analysis based on indication and diagnostic yields. S. afr med j 1993;83;245-248
- 4. Neugut ai garbowski gc, wayne j d. diagnostic yields of colorectal

Dr.Hitesh Chitroda et al.

- neoplasia with colonoscopy for abdominal pain, change in bowel habit and rectal bleeding. Amj gastroenterol 1993;88:1154-1156
- 5. Rex dk.colonoscopy gastrointest endosclin north am j 2000;10;135-160
- 6. Waye JD, Braunfeld SF. Surveillance intervals after colonoscopic polypectomy. *Endoscopy* 1982; 14: 7 9–81.
- 7. Goenka mk, kochhar r, Mehta sk. Spectrum of lower gastrointestinal haemorrhage; an endoscopic study of 166 patients. Indian j gastroenterol 1993;12:129-131
- 8. Jentschura D, Raute M, Winter J, *et al.* Complications in endoscopy of the lower gastrointestinal tract. Therapy and prognosis. Surg Endos 1994;8:672–6.
- 9. Schwartz SI (ed) (1979) Principles of surgery, 3rd edn. McGraw-Hill, New York, pp 1230–1233.

