



CLINICAL PROFILE AND COLONOSCOPIC FINDINGS IN ADULT PATIENTS PRESENTED WITH CHRONIC DIARRHEA

Gastroenterology

Denis Koshy

Resident, Department of Medical Gastroenterology, Kilpauk Medical College, Chennai.

**Kani Shaikh
Mohamed***

Associate Professor, Department of Medical Gastroenterology, Kilpauk Medical College, Chennai. *Corresponding Author

ABSTRACT

Background: Chronic diarrhea is a common and challenging problem in all age groups particularly in the elderly. It accounts for significant morbidity and mortality in adults. It can be caused by a number of both neoplastic and non neoplastic lesions. For accurate diagnosis of various colorectal lesions, colonoscopy is the gold standard, simple, convenient and cost effective procedure. The present study aims to scrutinize the clinical profile and colonoscopic findings in patients with chronic diarrhea in a tertiary care centre in South India

Method: This is a hospital based prospective observational study conducted from 1st September 2018 to 30th September 2019 at Department of Gastroenterology, Government Kilpauk Medical College Chennai, 128 patients were included in the present study. Study was cleared by institutional ethics committee of the hospital.

Results: We evaluated 128 patients (mean age 47.03), 66% of the patients were males, and majority of the patients were in the age group 50-59 years. The most common clinical presentation other than diarrhea was bleeding per rectum 42% followed by mass per abdomen (23%), abdominal pain (21%) and 14% had spurious diarrhea. Colonoscopy was normal in 13%, colorectal growth accounted for 32%, Mucosal ulceration in 23%, Ileocecal lesions in 17%, polyps in 15%. The most common diagnosis was carcinoma colon (34%), followed by IBD (UC-17%, Crohns-9%) Tuberculosis in 13%, Polyposis in 8%, SIBO and Chronic Pancreatitis in 5% each, Radiation proctitis and IBS in 3% each.

Conclusion: Chronic diarrhea causes significant mortality as age advances, the leading cause for which was found to be Carcinoma colon in this study. For accurate diagnosis of various colorectal lesions, colonoscopy is the gold standard, simple, convenient and cost-effective procedure.

KEYWORDS

Chronic diarrhea, Colonoscopy, carcinoma colon, IBD

INTRODUCTION:

Chronic diarrhea is a common and challenging problem in all age groups particularly in the elderly. It accounts for significant morbidity and mortality in adults. Its prevalence varies widely in different populations.¹ Chronic diarrhea is defined as the passage of soft or watery stool more than 3 times per day with or without blood and/or mucous or the passage of stool more than 200 g per day and last for more than 4 weeks.² Abnormalities found in lower gastrointestinal tract of chronic diarrhea varies widely in different populations. Chronic diarrhea in the developing world has been frequently attributed to chronic infections, especially parasitosis.³⁻⁴ The aim of this study was to see the abnormalities found in lower gastrointestinal tract in patients with chronic diarrhea who underwent colonoscopy and its relationship with age.

MATERIALS AND METHODS:

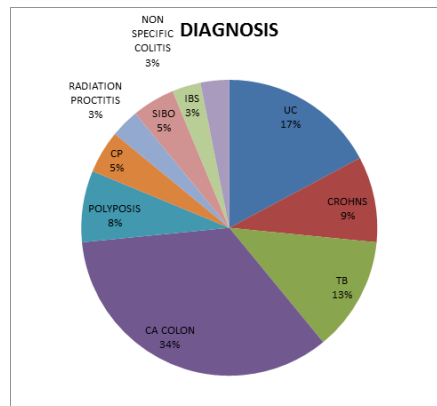
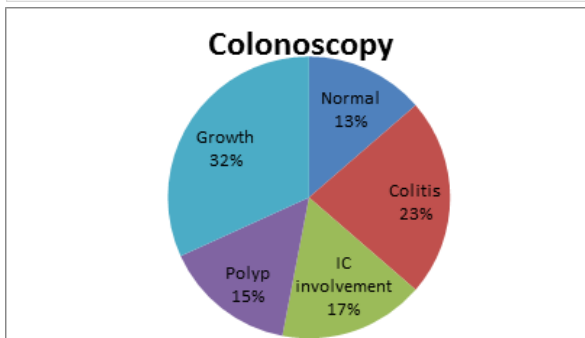
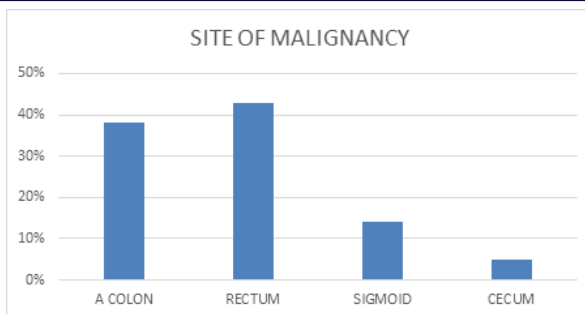
This is a single center hospital based prospective observational study conducted from 1st September 2018 to 30th September 2019 at Department of Gastroenterology, Government Kilpauk Medical College Chennai. Inclusion criteria for this study were all patients with chronic diarrhea of age 18 years and above who underwent colonoscopy. After enrolment in the study, as per pre-designed Proforma, detailed history was taken and relevant clinical examination was done. Bowel preparation was done using Polyethylen Glycol (PEG) and colonoscopy was done. The compiled data from the Proforma was entered and data analysis was done using SPSS version 20.

EXCLUSION CRITERIA:

Patients less than 18 years, patients contraindicated for colonoscopy, patients who had chronic diarrhea with known etiology.

RESULTS:

We evaluated 128 patients (mean age 47.03), 66% of the patients were males, and majority of the patients were in the age group 50-59 years. The most common clinical presentation other than diarrhea was bleeding per rectum 42% followed by mass per abdomen (23%), abdominal pain (21%) and 14% had spurious diarrhea. Colonoscopy was normal in 13%, colorectal growth accounted for 32%, Mucosal ulceration in 23%, Ileocecal lesions in 17%, polyps in 15%. The most common diagnosis was carcinoma colon (34%), followed by IBD (UC-17%, Crohns-9%) Tuberculosis in 13%, Polyposis in 8%, SIBO and Chronic Pancreatitis in 5% each, Radiation proctitis and IBS in 3% each. Most common site of malignancy was rectum (43%) followed by A colon (38%), sigmoid (14%) and cecum (5%).



DISCUSSION

The present study is a hospital based study, majority of the patients studied were natives of Tamil nadu in and around Chennai which cannot be regarded as representative of any community or population. Present study aims to establish colonoscopic biopsy as an effective tool in the diagnosis of chronic diarrhea. Chronic diarrhea is defined as the passage of soft or watery stool more than 3 times per day with or without blood and/or mucous or the passage of stool more than 200 g per day and last for more than 4 weeks². In many conditions, diarrhea is the result of the interplay of many factors, including epithelial function, motor function, and luminal composition. Chronic diarrhea is a common problem faced in gastroenterology practice worldwide which is associated with significant morbidity and mortality. It is important to recognize that diarrhea is a symptom or sign, not a disease, and can be caused by numerous conditions. Even though few infectious agents cause chronic diarrhea in an immunocompetent person, chronic diarrhea is not usually caused by an infectious agent. Therefore, when such a patient comes with features of chronic diarrhea, the treating physician must consider noninfectious causes first.

The clinical profile and colonoscopy findings and histopathological diagnosis were studied and correlated with histopathology. The mean age of the study patient was 47.03 years with age ranging from minimum of 18 years to maximum of 85 years. In this study, we found that the incidence of chronic diarrhea was more prevalent in male than female (66%). This result was similar to study conducted by Rafi et al and Khan et al which showed the incidence in male was more prevalent than female with a mean age of 40.⁵⁻⁶

The most common clinical presentation other than diarrhea was bleeding per rectum 42% followed by mass per abdomen (23%), abdominal pain (21%) and 14% had spurious diarrhea. Colonoscopy was normal in 13%, colorectal growth accounted for 32%, Mucosal ulceration in 23%, Ileocecal lesions in 17%, polyps in 15%. These results suggest that colonoscopy should be done for all cases of chronic diarrhea⁷⁻⁸.

The most common diagnosis was carcinoma colon (34%), followed by IBD (UC-17%, Crohns-9%) Tuberculosis in 13%, Polyposis in 8%, SIBO and Chronic Pancreatitis in 5% each, Radiation proctitis and IBS in 3% each. Among the specific diagnoses most commonly encountered cases were malignancy and ulcerative colitis in concordance with Kolhe HS et al study¹², whereas soudhamini S, et al study had polyps as most common specific diagnosis followed by malignancy¹³.

In this study Rectosigmoid region was the most commonly affected bowel segment followed by Ascending colon. Clinically these cases presented with anemia (average hemoglobin is 7 gm/dl), weight loss, mass abdomen and diarrhea, whereas cases with rectosigmoid tumor presented with occult blood in stool, tenesmus with diarrhea. The study showed that the incidence of colonic tumors was more prevalent in age > 40 years. This result did not differ much from some studies that showed the incidence of colon tumors tended to increase at 50 years old.⁹⁻¹¹

Most commonly affected segment for inflammatory bowel disease in the present study was recto sigmoid and the most common associated finding was bleeding per rectum. IBD was common in the younger age group. Tuberculosis presented with ileo-cecal mass and abdominal pain. Colonoscopy of those cases revealed ulcers with luminal narrowing mainly in the ileocecal region. Present study had 13% of cases whereas Kolhe HS et al study had 7.5% of cases (9/120 cases).¹²

These results suggested that there had been a shift in the causes of chronic diarrhea in developing countries, which previously thought to be due to bacterial or parasitic infection.

CONCLUSION:

Chronic diarrhea causes significant mortality as age advances, the leading cause for which was found to be Carcinoma colon in this study. For accurate diagnosis of various colorectal lesions, colonoscopy is the gold standard, simple, convenient and cost-effective procedure. Therefore, all the patients presenting with chronic diarrhea should be evaluated thoroughly with detailed history, clinical examination and colonoscopy with biopsy wherever possible.

REFERENCES

1. Simadibrata M. Disease of the small bowel in chronic diarrhea: diagnosis and treatment. *Med J Indones* 2002;11:179-89
2. Simadibrata M, Daldiyono. Diare akut. *Buku Ajar Ilmu Penyakit Dalam*. Edisi V. Jakarta: Pusat Penerbitan Ilmu Penyakit Dalam FKUI 2009.p.548-56.
3. Fine KD, Schiller LR (1999) AGA technical review on the evaluation and management of chronic diarrhea. *Gastroenterology* 116(6):1464-86
4. Ichayanagui C, Huamán C, Monge E, Beteta O, Flores C (1997) [Chronic diarrhea: clinical features]. *Bol Soc Per Med Int* 10(3). Available: http://sisbib.unmsm.edu.pe/bvrevistas/spmi/v10n3/diarr_cron.htm. Accessed 25 September 2012
5. Rafi UD, Zakaria M, Abid Butt MR. Chronic diarrhea. *Professional Med J* 2008;15:479-85
6. Khan Y, Muhammad N, Said A, Ashraf M. Endoscopic findings in patients with inflammatory diarrhea, a study of 40 cases. *Ann Park Inst Med* 2011;72:82-5
7. S. Degaonkar, A., D. Bhalge, S., & R. Chavan, A. (2018). Colonoscopic assessment of large bowel diseases and its effectiveness. *Surgical Review: International Journal of Surgery, Trauma and Orthopedics*, 4(4), 169-176.
8. R J Shah¹, C Fenoglio-Preiser, B L Bleau, R A Giannella Usefulness of colonoscopy with biopsy in the evaluation of patients with chronic diarrhea *Am J Gastroenterol* 2001 Apr;96(4):1091-5
9. Mayer RJ. Gastrointestinal tract cancer. 14th ed. *Harrison's Principles of Internal Medicine* 1998;2:571-6.
10. Javid G, Ali ZS, Rather S, Khan AR, Khan BA, Yattoo GN. Incidence of colorectal cancer in Kashmir Valley India. *Indian J Gastroenterol* 2011;30:7-11
11. Loddin D, Junt R, Champion M, Cockram A, Flook N, Gould M, et al. Guidelines on colon cancer screening. *Canadian J Gastroenterol* 2004;18:93-9
12. Kolhe HS, Mahore SD, Patil SS, Patil RN. To Study the endoscopic colonic biopsies of patients presenting with chronic watery diarrhea or constipation with special emphasis on microscopic colitis, *IOSR Journal of Dental and Medical Sciences (IOSR-JDMS)*. 2014;13(12):84-8
13. Soudhamini S. Histopathologic assessment of colonoscopic biopsies in cases of chronic diarrhea, researchgate, september 2009