



Prevalence of colorectal diseases in a tertiary care hospital

KEYWORDS

Colonoscopy, polyps, colitis, colorectal cancer, histochemical staining

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ABSTRACT

Colorectum is a site for various diseases that cause morbidity and mortality in all age groups. The range of diseases include from benign lesions like polyps, ulcers, inflammatory diseases like Crohn's disease and Ulcerative colitis and infectious diseases like Tuberculosis, Amoebiasis to malignancies. With the availability of video endoscopy systems it is now easy to visualise the entire colon and enter distal ileum to see and diagnose various conditions and to take biopsies for histological examination. The biopsy material for the study was obtained by colonoscopy from the Department of Gastroenterology, and resected specimens were obtained from the Department of Surgery, Kurnool medical college, Kurnool. The two year study highlight the prevalence of various diseases affecting the colorectum.

Introduction

Colorectal cancer is one of the most common cancers of the gastrointestinal tract and a leading cause of death in India. It is preceded by premalignant lesions like adenomas and serrated polyps that have long time before they turn into malignancy. This long dwelling period is ideal for detection by colonoscopy or Barium enema. Inflammatory bowel diseases like Crohn's disease and Ulcerative colitis are increasing in India due to modernisation and lifestyle modification.

Colonoscopy is the best available method to detect various colorectal lesions and to take biopsies for histopathological confirmation and it is also useful to assess the severity and extent of Inflammatory bowel diseases.

Materials and Methods

The present study was for two year from May 2003 to May 2005, was done in the Department of Pathology, Kurnool Medical College, Kurnool. During the period, 224 colonoscopies were performed for various indications, in the Department of Gastroenterology and 58 biopsies were received from Gastroenterology department. Another 108 resected bowel specimens were received from the department of surgery. Total 166 cases were studied. Olympus video colonoscope was used for taking biopsies.

Haematoxylin and Eosin stained sections of these 166 cases were reviewed and the lesions were tabulated. Histochemical staining could be undertaken in only 62 cases. Apart from haematoxylin and eosin staining, other histochemical stains like Periodic acid schiff's staining, Mucicarmine, Alcian blue, Reticulin stain, Masson's trichrome staining were undertaken.

All patients with symptoms of bleeding per rectum, chronic diarrhoea, unexplained weight loss, anaemia, constipation and constipation alternating with diarrhoea were subjected to colonoscopy in the department of Gastroenterology and 58 biopsies were done and sent for histopathological ex-

amination. The department of Pathology also received 108 resected surgical specimens from the department of surgery in the same period.

Discussion

The colorectum is the site for various diseases that afflict all age groups. The polyps are common in young age, inflammatory bowel diseases are common in 3rd and 4th decades¹.

Colorectal cancers are more common in older age groups²; whereas diverticular disease occurs in 6th and 7th decade. Colonoscopy is important to make the diagnosis of colorectal cancer and to take biopsies for histopathological examination. It is particularly useful in diagnosing ulcerative colitis. Full Colonoscopy is not recommended in patients with severely active disease for fear of perforation. After active disease has been controlled in a patient with newly diagnosed ulcerative colitis, colonoscopy must be performed to establish the extent of the disease and to exclude Crohn's disease. Multiple biopsies to be obtained from throughout the colon to map the histologic extent of disease and to confirm the diagnosis if there is concern about the Crohn's disease. The hallmark of Ulcerative colitis is symmetrical and continuous inflammation that begins in the rectum and extends proximally without interruption for the entire extent of disease.

Polyp is a discrete mass of tissue that protrudes into the lumen. They can ulcerate and bleed and can result in abdominal pain when a peristaltic wave propels polyp downstream, thereby stretching its blood supply and nerve fibres. The available evidence supports the hypothesis that most colon cancers arise within previously benign adenomatous polyps. Polyps are divided into two groups, neoplastic (adenoma and carcinoma) and non-neoplastic³. The non-neoplastic polyps are grouped into several categories; Hyperplastic polyps, Mucosal polyps, Juvenile polyps, Peutz Jeghers polyps, inflammatory polyps and others.

A polyp is assigned a histologic type on the basis of its predominant glandular pattern. According to World Health Organisation, adenomas are classified as tubular if atleast 80% of the glands are the branching, tubular type and a villous if atleast 80% of the glands are viliform. Familial adenomatous polyposis⁴ is characterized by the progressive development of hundred to thousands of adenomatous polyps in the large intestine. The patient who inherits the APC mutation does not develop adenomas until approximately 10-12 years of age.

Colorectal cancer is most common at recto-sigmoid area⁵; is increasing in incidence due to modernisation and life-style modification. It is more common in people who consume diet rich in fat⁶ and less common in people who take diet rich in fibre. Fibre increases the stool bulk, thereby diluting carcinogens and promoters of carcinogenesis, and minimising their duration of mucosal contact by decreasing intestinal transit time.

Observations

5197 patients attended Gastroenterology outpatient department during the period from May 2003 to May 2005. The number of males were 2984 (57.42%) and the females were 2213 (42.58%). 224 colonoscopies were performed during the period and the most common symptom was bleeding per rectum (58) and the most common cause of bleeding was internal haemorrhoids. These patients were treated with drugs, banding or haemorrhoidectomy. The next common causes for bleeding per rectum were colorectal cancer (15) and polyps (13). All polyps were subjected to colonoscopic polypectomy. Solitary rectal ulcer syndrome was noted in 5 patients, who were subjected for Argon Plasma Coagulation of ulcer base and one patient had Ulcerative colitis.

Colonoscopy was done for 55 cases who presented with constipation alternating with diarrhoea. The most common cause was Irritable bowel syndrome (41). The rest were diagnosed as Diabetic autonomic neuropathy. The diagnosis of Irritable bowel syndrome was established by motility studies at Asian institute of Gastroenterology, Hyderabad. The cases of Diabetic autonomic neuropathy were managed by medical therapy and strict diabetic control.

Colonoscopy was done in 49 patients with diarrhoea. Ulcerative colitis and colorectal cancer were found in 5 cases each, Tuberculosis of the colon was found in 2 cases and no lesion was detected in 37 patients.

24 patients with unexplained anaemia were subjected to colonoscopy showed growths in ascending colon in 4 patients and 2 patients had growths in descending colon.

Colonoscopic biopsies were taken in 58 cases and the commonest lesion was Colorectal cancer (45), ulcerative colitis (6), Solitary rectal ulcer syndrome in 5 cases and Tuberculosis of the colon in 2 cases, in that order.

Summary and conclusion.

The study was conducted for two years to know the prevalence of colorectal lesions in a tertiary care hospital. It was found that most of the lesions were found in the rectum

and recto-sigmoid area. Colonoscopy was the most useful to detect lesions early, to know the response to treatment, to know the relapse particularly in inflammatory bowel disease and to remove polyps without subjecting the patients for surgery.

FIGURE 1:

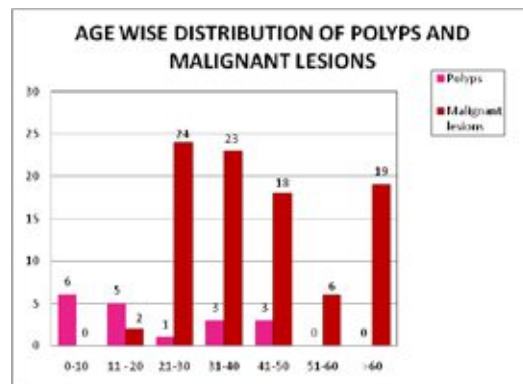


FIGURE 2:

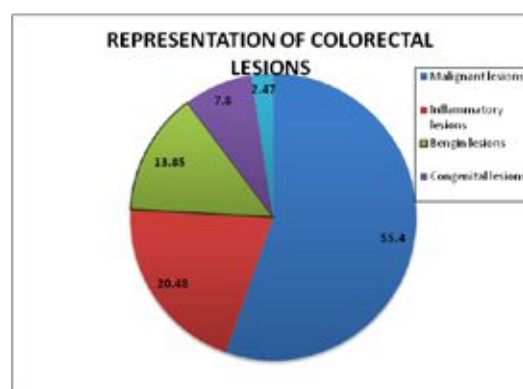
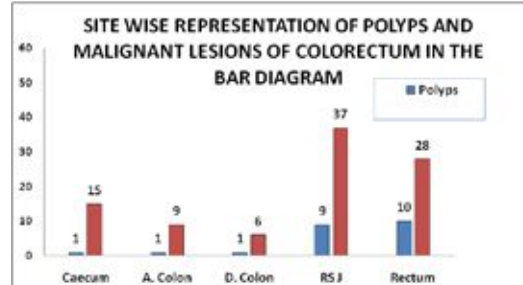


FIGURE 3:



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