

FREQUENCY OF ULCERATIVE COLITIS IN PATIENTS WITH BLOODY DIARRHOEA

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ABSTRACT

Background: Bloody diarrhea is the hallmark of ulcerative colitis. This study was conducted to know the frequency of ulcerative colitis in patients with bloody diarrhea in our set up.

Methodology: This cross-sectional study was conducted at Khyber Teaching Hospital, Peshawar, from June 2009 to June 2010. Fifty patients with bloody diarrhea were evaluated with colonoscopy and mucosal biopsies. Inclusion criteria were patients with bloody diarrhea of more than one month duration. Patients of amoebic and bacillary dysentery, elderly patients with predisposing factors for ischemic colitis, and those who did not consent for colonoscopy, were excluded. Previously diagnosed patients with acute relapses were also excluded. All patients were evaluated and prepared for colonoscopy on outpatient basis and were reviewed after histological reports.

Results: Out of 50 patients, 29(58%) were females and 21(42%) males, with age range 16-45 years. Thirty-six (72%) patients had disease of moderate severity and 14(28%) had mild disease. In 29 female patients 10 had histology reports consistent with ulcerative colitis and in 21 males 12 had histology of ulcerative colitis. As a whole 22(44%) patients had ulcerative colitis and the majority of these were between 26-35 years of age.

Conclusion: Frequency of ulcerative colitis in patients with bloody diarrhea is 44% and the majority of patients present between 26-35 years of age in our set up.

KEY WORDS: Ulcerative colitis, Bloody diarrhea, Inflammatory bowel disease.

INTRODUCTION

Ulcerative colitis is an inflammatory condition of unknown aetiology that involves the mucosa of colon and results in mucosal erosions and bloody diarrhea. Approximately 50% of patients have disease confined to the rectosigmoid, 30% extend to the splenic flexure and less than 20% extend more proximally.¹⁻²

It is more common in non-smokers and its severity may be lower in active smokers and worsen on cessation of smoking.³

Inflammatory bowel disease is estimated to affect over one million patients in United States.⁴ It is thought to be uncommon in patients of Asian descent but several reports from Asia, as well as migration studies of south Asians suggest that the incidence is increasing in these patients and may exceed that of Caucasians.⁵

The sex ratio is equal in the first four decades of life. Later the incidence in females falls whereas it remains the same in males.⁶ A second lesser peak of incidence has also been noted in some series between 55 and 65 years. There is a slight female predominance in Hispanics and African Americans and male predominance in Asians.⁷⁻⁸

The disease is classified clinically as mild, moderate and severe according to the Truelove and Witts criteria. (Table 1)

Table 1: Ulcerative Colitis assessment of diseases severity according to Truelove and Witt's criteria.

Parameter	Mild	Moderate	Severe
Stool frequency (per day)	<4	4-6	>6
Pulse (beats/min)	< 90	90-100	>100
Hematocrit (%)	Normal	30-40	<30
Weight loss (%)	None	1-10	>10
Temp (°F)	Normal	99-100	>100
ESR	<20	20-30	>30
Albumin (g/L)	Normal	3-3.5	<3

Bloody diarrhea is the hallmark of ulcerative colitis. There may be rectal discharge of mucus along with urgency and tenesmus. Left lower quadrant pain relieved by defecation is common.⁹ In general a poor prognosis is indicated by; a se-

vere initial attack, disease involving the whole colon, and increasing age, especially after 60 years. If the disease remains confined to left colon the outlook is better.¹⁰

This study was conducted to know the frequency of ulcerative colitis in patients with bloody diarrhea in our set up.

MATERIAL AND METHODS

This was a cross-sectional study conducted at Khyber Teaching Hospital, Peshawar, in which 50 patients with bloody diarrhea were evaluated with colonoscopy and mucosal biopsies from June 2009 to June 2010.

The inclusion criteria were patients with bloody diarrhea of more than one month duration. Majority of patients were referred by the general practitioners. The exclusion criteria included patients with infective causes of colitis such as amoebic and bacillary dysentery, and elderly patients with predisposing factors for ischemic colitis. Patients who did not consent for colonoscopy and those previously diagnosed with acute relapses were also excluded.

The procedure (colonoscopy) was fully explained to the patients and an informed consent was taken. All the patients were evaluated and prepared for the procedure on outpatient basis and reviewed after histological reports were available.

Statistical package for social sciences (SPSS) was used to analyze the data.

RESULTS

Out of 50 patients 29 (58%) were females and 21 (42%) males. The age range was from 16 to 45 years. (Table 2)

By Truelove and Witt’s criteria 72% patients had disease of moderate severity and 28% had mild disease.

Amongst 29 females patients of 10 had histology reports consistent with ulcerative colitis and

Table 2: Age and sex distribution of patients.

Age group (years)	Male	Female	Total
16 – 25	3	3	6
26 – 35	7	6	13
36 – 45	2	1	3
Total	12	10	22

out of 21 male patients 12 had characteristic histology of ulcerative colitis.

Twenty-two (44%) patients, 10 females and 12 males had ulcerative colitis and the majority of these were between 26-35 years of age. Twenty-eight (56%) patients (16 females and 6 males) had histology of chronic non-specific inflammation. (Figure)

DISCUSSION

Inflammatory bowel disease has been reported worldwide.¹¹ It is uncommon before the age of 10 years and most patients are between the 20-40 years at diagnosis.¹² Ten percent of inflammatory bowel disease patients are older than 60 years at the diagnosis with an equal distribution between chron’s disease and ulcerative colitis¹³. The highest incidence was in the 20-39 years age group. Rates decline progressively with age there after in both forms of inflammatory bowel disease, but only for woman.¹⁴ This is in accordance with our study in which 13 patients out of 22 were between the age groups of 25-36 years.

Both African-American and Hispanics showed a high female predominance for inflammatory bowel disease patients in contrast to Asian studies where a male predominance is suggested in both chron’s disease and ulcerative colitis.¹⁵ The male to female ratio in our study was 1.2:1 which is in accordance with studies in the western countries.^{17,18}

Earlier reports suggested that inflammatory bowel disease was less common in African-Americans compared to Caucasians, but followed a more severe course with higher rates of extra-intestinal manifestation and fistulizing disease.¹⁹ However, a

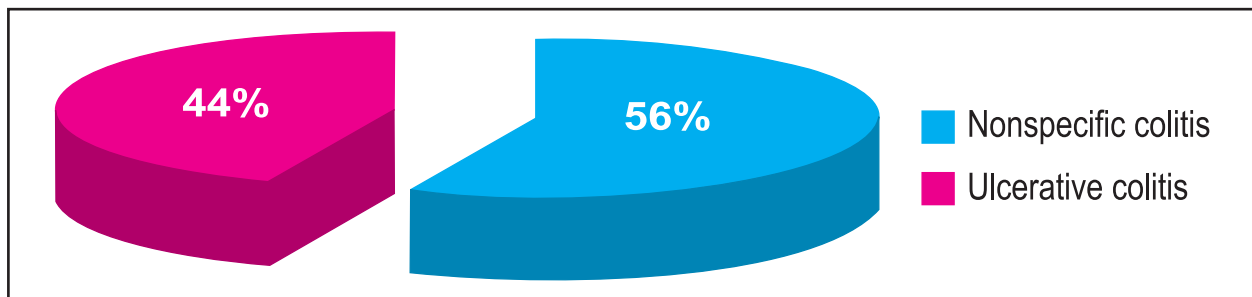


Figure: Frequency of ulcerative colitis in patients with bloody diarrhea.

recent review did not find significant differences in disease distribution or severity between African-Americans & Caucasians.²⁰ The important risk factors for colonic cancer among patients with ulcerative colitis are disease duration, and extent with the highest risk in those with long standing pancolitis.²¹ Colonoscopy with biopsies every 1-2 years should be carried out for early detection of dysplasia, the precancerous change in ulcerative colitis. This process begins after 8 years of pancolitis and 10-15 years of left side colitis, when risks of cancer become significant.²² Reports have shown that there is a rising frequency of ulcerative colitis in Pakistan and south Asia as opposed to lowest prevalence rates in China.²³

CONCUSSION

Frequency of ulcerative colitis in patients with bloody diarrhea is 44% and the majority of patients present between 26-35 years of age in our set up.

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