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CLINICAL PROFILE OF ULCERATIVE COLITIS

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ABSTRACT

Objectives: To study the clinical profile of ulcerative colitis (UC) in patients admitted to a tertiary care hospital in Peshawar.

Material and Methods: The study was conducted in the Department of Gastroenterology and Hepatology, Postgraduate Medical Institute Hayatabad Medical Complex, Peshawar, from January 2007 to December 2008. A total of hundred patients of previously established as well as newly diagnosed cases of ulcerative colitis were included in the study. A detailed history was taken and a thorough physical examination was performed on every patient. All patients were investigated with flexible sigmoidoscopy/ Colonoscopy and findings were recorded on a standard proforma. The results were analyzed using SPSS version 10.

Results: Out of 100 patients studied, 64 (64%) were male and 36 (36%) were female. The majority (56%) of patients were between 10 -30 years of age.The age range was 5 -70 years. The mean age was 26.08 years. Eighty percent of the patients were from Northern areas and 16% from Southern areas of NWFP. Ninety percent of patients presented with intestinal symptoms like bloody diarrhoea and abdominal pain. Clinically 56% of the patients had severe disease, 24% moderate disease and 20% had mild disease. On colonoscopy 12% of the patients had proctosigmoiditis, 56% left sided colitis and 32% had pancolitis. Twenty six percent of patients presented with extra intestinal manifestations.

Conclusion: Ulcerative colitis is more common in young males, most of them present with severe disease and extra intestinal manifestations are not very rare.

Key Words: Ulcerative colitis, clinical profile, colonoscopy, pancolitis, Extraintestinal manifestations.

INTRODUCTION

Ulcerative colitis involves the colon and is characterized by diffuse, superficial Inflammation. It begins in the rectum and extends proximally to involve any contiguous length of colon. The distal ileum may exhibit similar superficial inflammation, usually in the setting of extensive colitis, termed backwashileitis[1]. In South America, Asia, and Africa this disease remains uncommon but appears to be increasing. Ethnic and racial variations exist within geographic areas in the incidence of Irritable Bowel Disease (IBD)[2]. Relatives of patients with IBD have an increased risk of that particular disease[3].

The peak age of onset for IBD is between 15 and 25 years. A second, lesser peak of incidence has also been noted in some series, between 55 and 65 years[4]. There is an approximately equal incidence of both diseases in males and females, but some studies show an increased incidence of ulcerative colitis among males[4].

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Nonsmokers are at increased risk of ulcerative colitis compared to smokers[5–8]. When appendectomy is performed for an inflammatory problem, such as lymphadenitis or appendicitis particularly before the age of 21 years, it strongly protects against ulcerative colitis[9-10]. The greatest risk factor for developing IBD is a positive family history[11]. Approximately 15% of patients with IBD have first-degree relatives who also have IBD[12]. Fertility in women with IBD is normal or only minimally impaired[13-14]. There is some suggestion that clinically active disease, irrespective of drug therapy is associated with fetal complications such as low birth weight and preterm delivery[15].

Approximately 25%-30% of cases present with Ulcerative proctitis, defined by inflammation limited to the distal 15-20 cm of rectum[16-17]. Another 40% of ulcerative colitis cases present with Proctosigmoiditis or left-sided colitis[16-18]. Less than 20% of patients present with Extensive colitis (pancolitis) in which the inflammation extends into the transverse or right colon. These patients are more likely to present with diarrhea as a result of the diminished absorptive capacity of the colon[19]. They may also have weight loss, systemic or extraintestinal symptoms, and anemia[17]. The diagnosis of ulcerative colitis is made on the basis of clinical, endoscopic, and histological findings[20]. Numerous studies have been published from Europe, North America, China and India

providing tremendous information regarding the epidemiological and clinical characteristics of inflammatory bowel disease and specially Ulerative Colitis (UC) in these areas[21,23].

Ulcerative Colitis is considered to be uncommon in Pakistan, however several reports have shown that there is a trend towards an increased incidence of ulcerative colitis here as well[24-29]. Furthermore there is limited data available on the clinical profile of ulcerative colitis from our part of the world and more data is required to study the disease course. The aim of the present study was to describe the clinical features of UC in hospital based patients from NWFP.

MATERIAL AND METHODS

This study was conducted in the Department of Gastroenterology and Hepatology, Postgraduate Medical Institute, Hayatabad Medical Complex, Peshawar from January 2007 to December 2008. Out of total admitted cases in the study period, 100 consecutive cases of previously established as well as newly diagnosed cases of ulcerative colitis were studied.

A detailed history was taken and a thorough physical examination was performed on every patient. Relevant hematological, biochemical, serological and histological investigations were done on all patients. The diagnosis of ulcerative colitis was made on the basis of clinical, endoscopic, and histological findings. All patients were investigated with flexible sigmoidoscopy/ Colonoscopy and findings were recorded on a standard proforma.

The severity of UC at presentation was assessed according to True Love and Witts criteria as mild, moderate and severe disease as shown in the Table 1. Data including demographics, level of education and occupation, marital status, disease location and behavior, extra intestinal manifestations, complications and treatment was collected from all patients and was recorded on a standard proforma. Statistical analyses were performed using SPSS version 10. The exclusion criteria was patients suspected of infective causes of colitis like bacillary and amoebic dysentery and antibiotic associated colitis, microscopic colitis and ischemic colitis and those patients who did not consent for the study.

RESULTS

Out of 100 patients studied, 64 (64%) were male and 36(36%) were female. The maximum number of patients was between 10-30 years (56%). The age range was 5-60 years. The mean age was 26.08 years (Table 2). Eighty percent of patients were from northern areas and 16% from southern areas of NWFP. Forty percent of patients had disease duration of less than 2 years, 30% had 2-5 years, 20% had 5-10 years and about 10 % had more than 10 years. Majority of the patients (90%) presented with intestinal symptoms like bloody diarrhea and abdominal pain. The presentation with predominant extra intestinal manifestations like joint pains, pyrexia of unknown origin, and sclerozing cholangitis was uncommon however 26% of patients had extraintestinal manifestations as well (Table 3). The disease severity according to the Truelove and Witts criteria was mild in 20% of patients, moderate in 24% and severe in 56% of the patients. On colonoscopy 40% of patients had severe colitis, 52% had moderate colitis and 8% had mild colitis. The extent of the disease was proctosigmoiditis in 12%, left sided colitis in 36% and pancolitis in 32% of patients.

Table 1: Ulcerative Colitis Assessment of disease severity according to Truelove and Witts criteria.

	Mild	Moderate	Severe
Stool Frequency (Per Day)	< 4	4-6	> 6 (Mostly blood)
Pulse (beats/min)	< 90	90-100	>100
Hematocrit (%)	Normal	30-40	<30
Weight Loss (%)	None	1-10	>10
Temperature (F^0)	Normal	99-100	>100
ESR (mm/h)	<20	20-30	>30
Albumin (g/dl)	Normal	3-3.5	< 3

Table 2: Age/sex Distribution

Age	Male	Female	Total
< 10 years	12	6	18(18%)
10 – 30 years	40	16	56 (56%)
31 – 50 years	8	8	16 (16%)
> 50 years	4	6	10 (10%)
Total	64	36	100 (100%)

Table 3: Extra Intestinal Manifestations

Manifestation	No. of patients and percentage
Arthritis	5(5%)
Ankylosing spondylitis	1(1%)
Sclerosing cholangitis	2(2%)
Oral ulcerations	4(4%)
Osteomalacia	14(14%)

DISCUSSION

Very limited data is available on the incidence and prevalence of ulcerative colitis in Pakistan

however it does exist in South East Asia specifically Pakistan probably at a lower frequency than in the West[24,25,26,30]. Although the data needs to be interpreted cautiously, it is possible that Asians have a greater genetic susceptibility to IBD than Caucasians, but the environmental factors may be different[31].

The ratio of male to female patients was 1.77:1 in our study, showing male gender dominance for ulcerative colitis, which is in accordance with the ulcerative colitis studies in the Western countries[31,32]. The average age of our patients was 26 years, similar to that in Western countries but younger than those in Chinese populations (42 years).

The peak period for the diagnosis of U.C is in the second and third decades of life, which is in accordance with that in North American patients. No bimodal peak in the age was seen in our study which is different from studies reported from Europe[33]. Most of the patients had the disease duration less than 2 years which is similar to that reported by Loftus et al and Wagtmans[34]. Most of the patients (90%) in our study presented with abdominal pain and bloody diarrhea similar to that reported from Peshawar by other colleagues[28]. Severe ulcerative colitis was found in 56%, moderate in 24%, and mild in 20% of patients. Half of the patients in this study had left sided colitis (56%), with proctosigmoiditis in 12%, and pan colitis in 32%. This finding is comparable with other reports from Asia[36]. Extra intestinal manifestations (EIM) were not very uncommon, observed in 26% of patients. The reported frequency of EIM in patients with IBD varies from 6%-47% according to other studies[37].

CONCLUSION

Ulcerative colitis is more common in young males and high index of suspicion is necessary in those who present with bloody diarrhoea not responding to conventional treatment.

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