



Original Article

Disease severity and colonic involvement of Ulcerative colitis in a tertiary care hospital of Rajshahi Medical College.

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Abstract

Ulcerative colitis is an idiopathic inflammatory bowel disease characterized by continuous mucosal inflammation that starts in the rectum and extends proximally. Ulcerative colitis is considered frequent in majority of European and North American population and exceptional in most of the developing Asian countries. The present study was designed to estimate the disease severity and colonic involvement of ulcerative colitis in a tertiary care hospital of Rajshahi Medical College. The study population includes of 60 ulcerative colitis patients. Patients were categorized on the basis of disease severity ; moderate : 34, and severe: 26 and involvement of colon: 28 (46.40%) pancolitis, 20 (33.96%) left sided colitis and had 12 (19.61%) proctosigmoiditis.

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Introduction

Ulcerative colitis is classically characterized by alternating stages of clinically active and inactive disease, a pattern seen in 80- 90% of patients caused by inappropriate and continuing inflammatory response to gut microbacteria on a background of genetic susceptibility¹. Ulcerative colitis is precipitated by a complex interaction of environmental, genetic and immunoregulatory factors. Family history is a major predisposing factor for ulcerative colitis. Although sporadic cases do occur at large². The common end pathway is inflammation of the mucosal lining of the intestinal tract causing ulceration, edema, bleeding, diarrhea, fluid and electrolytes loss. Many inflammatory mediators have been

identified in ulcerative colitis and considerable evidence suggests that these mediators play an important role in the pathogenic and clinical characteristic of these disorders. Standard treatment for ulcerative colitis depends on the extent of involvement and disease severity. The goal is to induce remission initially with medications followed by the administration of maintenance medication to prevent a relapse. Mesalazine and olsalazine has made the management much easier than even before and are most preferred regimens than sulphasalazines³. Ulcerative colitis once considered to be common in the western population has witnessed a relative stable on decreasing trend in western European region⁴. Its prevalence has seen an upsurge in

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previous low incident areas such as Asia, Eastern Europe⁵⁻⁷ and North Indians⁸. More reliable information is available from Asian migrants in western countries than from Asians in Asia⁹. The present study was designated to evaluate the disease severity and colonic involvement of ulcerative colitis in a population attending a tertiary care hospital of Rajshahi Medical College.

Material and Methods

A total of 112 patients attending the department of Medicine of Rajshahi Medical College Hospital between March 2012 to June 2014 with complaints of irregular bowel movements, bloody diarrhea and mucous in the stools were retrospectively screened for the present study. Of these 100 patients agreed to take part in the study and abide by the protocol which included completing health related quality of life (HR-QOL) questionnaire. Among 100 patients, 10 lost of follow-up and only 90 patients completed the study. The major reason for patients lost to follow-up was found to be symptomatic improvement in

the disease status. Study subjects with 20 to 60 year of age, histologically and endoscopically confirmed diagnosis of established ulcerative colitis. Subjects with crohn's disease, colonic malignancy and hepatitis B virus, symptoms of active tuberculosis were excluded from the study.

The study population consisted of 112 patients of which 60 had confirmed with moderate to severe ulcerative colitis. The disease characteristics of the enrolled study participants are presented in the table- 1. The study population had 38 males and 22 females. Diagnosis of ulcerative colitis was done as per conventional clinical, endoscopic and histological criteria^{10, 11}.

Patients with ulcerative colitis were categorized broadly based on the type of disease phenotype (i.e. localization of the disease in the large intestine) and histological study. The present study, only with moderate to severe disease were included.

Results

The age of patients with ulcerative colitis was >18 years. The total patients with ulcerative colitis were males :38 (63.33%) and the rest were females : 22 (36.67%). The proportion of patients with moderate ulcerative colitis was 34 males (57.14%) and 26 females (54.54%), and severe was 26 males (42.10%) and 10 females (45.46%). Site of involvement of ulcerative colitis Pancolitis (46.40%), Left sided colitis (33.96%) and Proctosigmoiditis (19.61%).

Table- 01 : Disease type and severity of ulcerative colitis

Sex	Histological classification	
	Moderate, n (%)	Severe, n (%)
Male (n=38)	22 (57.19%)	16 (42.10%)
Female (n=22)	12 (54.54%)	10 (45.46%)
Total (n=60)	34 (55.87%)	26 (43.78%)

Table- 02 : Site of involvement of ulcerative colitis

Sex	Phenotype classification		
	Pancolitis ,n(%)	Left sided colitis,n(%)	Proctosigmoiditis ,n(%)
Male (n=38)	18 (47.36%)	12 (31.57%)	08 (21.05%)
Female (n=22)	10 (45.45%)	08 (36.36%)	04 (18.18%)
Total (n=60)	28 (46.40%)	20 (33.96%)	12 (19.61%)

Discussion

There is an urgent need to evaluate the exact magnitude of severity and colonic involvement of ulcerative colitis. In our study males are more affected than females in which males were 38 and females were 22 in number and this result was not similar showed by langer et al , (2007)¹² where males and females were equally affected. According to disease severity, 55.87% ulcerative colitis patients were suffering from moderate ulcerative colitis where males were more affected (M : F = 57.19% : 54.54%). Severe ulcerative colitis was 43.78% in which females were more sufferer than males (F:M= 45.46 % : 42.16%). Most patients were suffering from pancolitis 46.40% then Left sided colitis 33.96% and Proctosigmoiditis 19.61%.

Conclusion

In conclusion, results of the present study suggest ulcerative colitis to be predominant in males than females. Severity was more in case of female patients. Pancolitis (46.40%) was more than left sided colitis (33.96%) and Proctosigmoiditis (19.61%).

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