



## PREVALENCE OF COLONIC DIVERTICULOSIS IN IRRITABLE BOWEL SYNDROME PATIENTS

### Gastroenterology

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### ABSTRACT

Irritable bowel syndrome (IBS) is a chronic gastrointestinal disorder. Patients may suffer from abdominal discomfort, bloating or pain associated with disturbed defecation. The etiology has not been clear. Colonic diverticula are mucosal outpouchings through the large bowel. Recent study demonstrated more prevalence of diverticulosis in IBS.

### KEYWORDS

Irritable bowel syndrome, Colonic Diverticulum

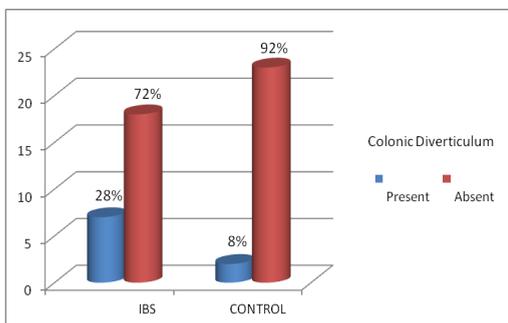
**AIM** – To determine the prevalence of diverticulosis in IBS patients and the association between diverticulosis and IBS patients.

**METHODS** - Total of 50 patients were included in the study which consisted of IBS group (25 patients) and control group (25 patients). IBS was defined by Rome III criteria. Medical history, physical examination and colonoscopy was done.

**RESULTS** - The IBS group consisted of 12 males and 38 females with a mean age of 52 years. There was no significant difference in age, gender and BMI between IBS group and control group ( $p > 0.05$ ). The prevalence of colonic diverticulum of IBS group was 24% and control group was 12%. There was statistically significant difference in prevalence between both groups ( $p$  value = 0.03). Comparison of location of diverticulum, right sided colon and cecum diverticula were mostly found in IBS group and in control group were found in rectosigmoid region. There was no significant difference in location of diverticulum between both groups. There was no significant difference in numbers of diverticula between both groups ( $p$  value = 0.09).

### REFERENCES –

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**DISCUSSIONS** – The pathogenesis of IBS is uncertain but may be multifactorial. One pathogenesis of IBS is abnormal large bowel motility[1]. Patients with colonic diverticular disease also have abnormal large bowel motility and abnormal colonic contractility causing a thickening of the tunica muscularis in the diverticular area[2]. Lack of intrinsic inhibition mediated by nitric oxide may contribute to impaired muscle relaxation in IBS and colonic diverticular disease[3]. Another pathophysiology in IBS is visceral hypersensitivity resembling colonic diverticular disease with a low threshold perception to colonic distension[4]. One epidemiologic study showed an association of low-fiber diet with colonic diverticular disease[5]. Low fiber diet caused stasis of bowel contents and bacterial overgrowth. Bacterial overgrowth induced chronic inflammation affecting the afferent neurons in the myenteric plexus and submucosa, causing visceral hypersensitivity and abnormal colonic contractility and colonic symptoms resembling symptoms of IBS.

**CONCLUSIONS** – Prevalence of diverticulosis in IBS group was more than in control group. The pathogenesis of IBS and colonic diverticulosis may share a similar pathway and this aspect should be further studied.