

Abstract:

AIM: To estimate serum levels of proinflammatory cytokine TNF- α in adult patients of diarrheal type of Irritable Bowel Syndrome.

MATERIALS AND METHODS: A Prospective case control study was carried out among diarrhea predominant IBS patients attending our institute. Patients aged 18- 75 years with diarrhea predominant IBS fulfilling ROME III Criteria were included in the study. Age and Sex matched healthy volunteers were taken as control group. Pregnant women, immunodeficient patients, those diagnosed with lactose intolerance and psychiatric patients were excluded from the study. Both the groups of patients were subjected to clinical examination and investigated for thyroid dysfunction, acute inflammatory markers. Sigmoidoscopy and biopsy was done to rule out microscopic colitis. Cytokine assay was done from peripheral blood sample by ELISA.

RESULTS: A total of 40 patients were included in case group and an equal number of age and sex matched population were taken as study group. There was a significant difference ($p < 0.05$) in serum levels of TNF α between IBS -D patients (15.18 ± 0.11 pg/ml) and healthy I α levels and abdominal pain ($p = 0.03$). There was no correlation between abdominal bloating, stool frequency with serum levels of TNF α .

CONCLUSION: Increased levels of pro inflammatory cytokine are seen in patients with IBS–D suggesting an underlying inflammation. There is a significant correlation between abdominal pain and TNF α levels.

Keywords: Irritable bowel syndrome, Cytokine, TNF alpha, Pathophysiology.