Title: Impact of Multiple Sclerosis on the Outcomes of Patients Hospitalized with Inflammatory Bowel Disease

Category: Clinical Research

### Authors

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# **Background**

It has been reported that there is a possible association between inflammatory bowel disease (IBD) and multiple sclerosis (MS). Some studies suggest that there are familial links and shared genetic factors between two diseases, and MS course appears to be milder in patients with concomitant IBD. On the other hand, there is a lack of studies on how the outcomes of IBD are affected by MS. Thus, we aim to assess the outcomes of IBD in patients with concomitant MS.

## Methods

Patients hospitalized with IBD from the National Inpatient Sample, Healthcare Cost and Utilization Project, Agency for Healthcare Research and Quality in the year 2014 were selected. Patient demographics and outcomes of IBD were compared between the groups with and without MS. The outcomes of interest were inpatient mortality, length of stay, total hospital charge, and IBD complications including malnutrition, penetrating disease, stricturing disease/bowel obstruction, colectomy, and ileostomy.

## **Results**

Among 34,374 patients with IBD identified in the study, 132 patients had MS. Between the groups with and without MS, there were no statistically significant differences in inpatient mortality, length of stay, and total hospital charge (all p > 0.05). There were no statistically significant differences in IBD complications including malnutrition, penetrating disease, stricturing disease/bowel obstruction, colectomy, and ileostomy (all p > 0.05).

### Conclusion

Our study indicates that there are no differences in outcomes between IBD patients with and without MS including inpatient mortality, length of stay, total hospital charge. There were no differences in IBD complications such as malnutrition, penetrating disease, stricturing disease/bowel obstruction, colectomy, and ileostomy. Despite possible genetic links between IBD and MS, our study suggests that outcomes of IBD are not affected by the presence of MS.