

Title: Cannabis Use is Associated with an Increased Risk of Intestinal Obstruction in Patients Hospitalized with Diverticulitis

Category: Clinical Research

Authors

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Background

Several studies have shown associations between outcomes of diverticulitis and tobacco, caffeine, or alcohol use respectively. Some studies have suggested that smoking is associated with increased risk of complications of diverticulitis. However, there is a lack of data on the effect of cannabis use on the outcomes of diverticulitis. Thus, we aim to assess the outcomes of diverticulitis in patients with history of cannabis use.

Methods

Patients hospitalized with diverticulitis 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 diverticulitis were compared between the groups with and without history of cannabis use. The outcomes of interest were inpatient mortality, length of stay, total hospital charge, hypotension/shock, intestinal abscess, intestinal obstruction, intestinal fistula, intestinal perforation, and colectomy.

Results

Among 48,214 patients with diverticulitis identified in the study, 447 patients had history of cannabis use. Among patients hospitalized with diverticulitis, those with cannabis use had shorter length of stay (4.3 days vs. 4.7 days, $p < 0.05$). There were no statistically significant differences in inpatient mortality and total hospital charge (all $p > 0.05$). Cannabis use was an independent risk factor for intestinal obstruction (OR 1.71, 95% CI: 1.06-2.77, $p < 0.05$). However, adjusted odds ratios of shock/hypotension, colectomy, intestinal abscess, intestinal fistula, and intestinal perforation were not statistically significant (all $p > 0.05$).

Conclusion

Our study indicates that patients hospitalized with diverticulitis with history of cannabis use are more likely to have intestinal obstruction. Inhibition of gastrointestinal motility by cannabis in the setting of diverticular inflammation may explain this finding.