

# BURDEN AND IMPACT OF CANNABIS USE DISORDER ON OUTCOMES OF IBD PATIENTS WITH ALCOHOL ABUSE: A NATIONAL INPATIENT SAMPLE ANALYSIS 2019

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## Introduction

- Alcohol use disorder can potentially trigger Inflammatory bowel disease (IBD) flare-ups. With increasing use of cannabis for symptomatic relief in IBD, the impact of its chronic/habitual use on IBD outcomes remains unclear.
- Therefore, in this study we aimed to assess the burden and impact of concomitant cannabis use disorder (CUD) on IBD patients with known alcohol abuse.

## Methods and Materials

- The National Inpatient Sample (2019) with relevant ICD-10 codes were used to identify Alcoholic Inflammatory Bowel Disease (IBD) patients and Cannabis Use Disorder (CUD).
- We compared demographics, comorbidities, and outcomes of alcoholic IBD patients with vs. without CUD. Primary endpoints were hospital outcomes [MACCE:all-cause mortality, acute myocardial infarction (MI), cardiac arrest and stroke], intestinal obstruction, colorectal cancer, colectomy, acute kidney injury [AKI], and sepsis compared between CUD and non-CUD cohort among alcoholic IBD patients.
- Multivariable regression analyses were performed adjusting for demographics, hospital-level characteristics and relevant comorbidities.

	Odd ratios	95% CI - Lower	95% CI - Upper	P- value
<b>MACCE</b>	<b>0.95</b>	<b>0.41</b>	<b>2.21</b>	<b>0.909</b>
<b>Intestinal obstruction</b>	<b>1.80</b>	<b>0.75</b>	<b>4.29</b>	<b>0.187</b>
<b>GIH</b>	<b>0.54</b>	<b>0.29</b>	<b>1.02</b>	<b>0.590</b>
<b>Colorectal cancer</b>	<b>1.42</b>	<b>0.37</b>	<b>5.54</b>	<b>0.610</b>
<b>Acute Kidney Injury</b>	<b>0.60</b>	<b>0.35</b>	<b>1.02</b>	<b>0.061</b>
<b>Sepsis</b>	<b>0.43</b>	<b>0.10</b>	<b>1.82</b>	<b>0.250</b>

Table 1 - Multivariate odds of in-hospital outcomes in IBD-Alcohol Abuse Patients with vs. without Cannabis Use Disorder

MACCE - Major Adverse Cardiovascular and Cerebrovascular Events - all cause mortality, acute MI, cardiac arrest, stroke. Multivariate regression models were adjusted for : Age, Sex, Race, Median household income quartile, payer status, type of admission, hospital bed size, location, teaching status, hypertension, diabetes, dyslipidemia, obesity, PVD, Prior MI, Prior PCI, Prior CABG, drug abuse, smoking, Prior TIA & Stroke, Prior VTE

## Results

- Of 11,140 hospitalizations with IBD and alcohol abuse, 1130 (10%) concomitantly had CUD. Majority of the CUD cohort was white, male and the median age at admission was 40 years (IQR 33- 51). Most of them were Medicaid enrollees (41.2%) and belonged to lower 2 median household income national quartiles (31.7, 31.2%) The CUD cohort had a lower rate of traditional cardiovascular risk factors and pulmonary comorbidities except higher rate of tobacco use disorder vs. non-CUD cohort.
- Rates of intestinal obstruction (aOR 1.80; 95%CI:0.75-4.29) (p=0.187) and colorectal cancer (aOR 1.42; 95% CI:0.37-5.54)(p=0.610) were high among the CUD cohort (Table 1). However, neither of them attained statistical significance.

## Discussion

- Despite a higher burden of cardiovascular disease risk factors, the CUD cohort had comparable outcomes/complications in alcoholic IBD patients vs. non CUD cohort.
- Future prospective studies are warranted to confirm and validate these findings focusing on mode, dose and duration of recreational/medicinal use of cannabis in IBD patients with rising prevalence of polysubstance use in the US.