BACKGROUND: While there is pre-clinical data that suggests cannabis use may have anti-inflammatory effects in inflammatory bowel disease (IBD), there is still uncertainty as to whether cannabis has clinical benefits or affects symptoms in patients with IBD. This study had two parts: first, to determine rates of cannabis use among patients with IBD compared to patients without IBD but seen in the outpatient gastroenterology setting, and second, to determine whether cannabis use is associated with clinical markers of disease activity among patients with IBD.

METHODS: Data was obtained retrospectively from outpatient gastroenterology encounters at Virginia Mason Medical Center from January 1, 2016, to November 30, 2018. All patients were provided a handout at each encounter with questions regarding marijuana use in the prior twelve months and whether the patient obtained benefit. For patients with IBD, the Harvey-Bradshaw Index and the simple clinical colitis activity index scores were obtained for patients with Crohn’s disease (CD) and ulcerative colitis (UC), respectively. Data regarding objective markers of inflammation, including C-reactive protein, fecal calprotectin, and endoscopy were collected if available within six months of the encounter. Frequent cannabis use was defined as daily or weekly use.

RESULTS: 1,094 patients were included in the first cohort examining rates of cannabis use. There were no differences in rates of cannabis use in the preceding twelve months among patients with IBD compared to those without IBD (26.3% v. 25.7%, p = 0.12). Likewise, rates of frequent cannabis use were similar among patients with and without IBD (47.8% v. 55.6%, p = 0.33). There were also no differences in the number of patients with cannabis use who reported benefit (IBD patients 76.6% v. patients without IBD 79.6%, p = 0.4).

There were 220 patients included in the second cohort of IBD patients exclusively. Compared to patients with no cannabis use, IBD patients with frequent cannabis use were equally likely to be on a biologic or janus kinase inhibitor at the time of the encounter (58.4% v. 54.5%, p = 0.34). Additionally, when comparing IBD patients with frequent cannabis and no cannabis use, there were no differences in mean C-reactive protein levels (8.7 v. 13 mg/dL, p = 0.67), mean fecal calprotectin level (381 v. 268 μg/mg, p = 0.99), rates of endoscopic inflammation (72% v. 79%, p = 0.39), or need for medications to control diarrhea (24% v. 15%, p = 0.19).

CONCLUSIONS: Rates of cannabis use and reported benefit of cannabis use were not different among patients with IBD and patients seen in the outpatient gastroenterology setting without IBD. Additionally,
there were no significant differences in IBD related medication use or markers of inflammation among IBD patients with frequent cannabis use compared to IBD patients without cannabis use

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