MASSACHUSETTS GENERAL HOSPITAL
GASTROENTEROLOGY

HARVARD MEDICAL SCHOOL

Choice of sedation for initial colonoscopy determines compliance with follow-up colonoscopy in patients with a history of trauma

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INTRODUCTION

Approximately 7% of Americans report post-traumatic stress disorder (PTSD). Despite the invasive and often sensitive nature of our specialty, little has been studied regarding best practices for trauma-informed care in gastroenterology. We hypothesize that endoscopy with conscious sedation (CS) may reactivate trauma and impact follow-up care.

AIM

To assess factors that may determine colonoscopy compliance in the PTSD population.

METHODS

All patients aged 50-74 years old seen at our hospital system's primary care practices from 12/31/2009-12/31/2019 were included. Diagnoses were assessed by ICD-coding, and demographics and procedure documentation were obtained from the medical record. Adjusted odds ratios were calculated via logistic regression.

Patients with PTSD are less likely to undergo surveillance colonoscopy than controls.

However, they are **significantly** more likely to undergo surveillance colonoscopy **if the initial colonoscopy is performed under general anesthesia** (OR 6.25, 95% CI 2.70-11.46).

RESULTS

65,062 patients were included in the study, of which 3.7% had a diagnosis of PTSD. The majority of those with PTSD were female (62%). Those who underwent a colonoscopy (N=7,356) versus those who did not (N=57,706) were similar in demographics. However, PTSD patients were more likely to undergo colonoscopy than those without trauma (OR 7.31, 95% CI 5.67-9.42). This was attenuated after additionally controlling for irritable bowel syndrome or chronic diarrhea (OR 3.37 95% CI 2.5-4.52). In contrast, after initial colonoscopy, PTSD patients trended toward lower likelihood of receiving follow-up colonoscopy (OR 0.85, 95% 0.49-1.46). Notably, all patients were more likely to undergo follow-up colonoscopy if the initial procedure was performed with general anesthesia (GA) (OR 2.05, 95% CI 1.82-2.30), however, this effect was significantly amplified among PTSD patients (OR 6.25, 95% CI 2.70-11.46) compared to patients without trauma (OR 2.05, 95% CI 1.82-2.31).

Table 1. Demographics all patients in MGB from 12/31/2009-12/31/2019 betweena ges 50-74

	No screening colonoscopy, n (%)	Screening colonoscopy, n (%)	*p* Value
Demographics	**N=57,706**	**N=7,356**	
Age (mean, SD)	68.79 (7.86)	68.42 (7.77)	0.047
Race (n, %)			0.113
White	50,600 (87.7)	6,572 (89.3)	
Black	2,687 (4.7)	316 (4.3)	
Asian	1,316 (2.3)	149 (2.0)	
Male (n, %)	24,238 (42.0)	3,155 (42.9)	0.289
High Poverty Zip Code (n, %)	466 (0.8)	49 (0.7)	0.223
History of trauma (n, %)	127 (0.2)	117 (1.6)	**<.001**
History of IBS (n, %)	127 (0.2)	237 (3.2)	**<.001**

CONCLUSIONS

PTSD patients comprise a notable portion of the outpatient screening population. These patients are more likely to be compliant with follow-up colonoscopy if initial procedure is performed under GA, an effect that is significantly magnified compared to the non-PTSD population. Current paradigms do not routinely screen for PTSD when considering candidates for GA, and so while the choice must be individualized, this finding has important clinical implications. PTSD patients may be keener to undergo initial colonoscopy due to active GI symptoms given the strong overlap with functional GI disorders. However, poor tolerance or a negative experience with CS may impact follow-up. This remains to be validated in future prospective studies.