Examining prior workup and treatment of Veterans with irritable bowel syndrome at a single center

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Introduction

Irritable Bowel Syndrome (IBS) is a disorder of gut-brain interaction (DGBI) that afflicts about 5% of the population with significant quality of life and economic impacts. Recent guidelines from major gastroenterology societies have been established to improve diagnosis and management of IBS. Within the Veteran population, there is poor understanding of the epidemiology of DGBI despite significant occupation exposures, comorbid mental health problems and risk of deployment-associated diarrhea. Overall, less is known about the management of DGBI in Veterans compared to other patient populations.

Methods

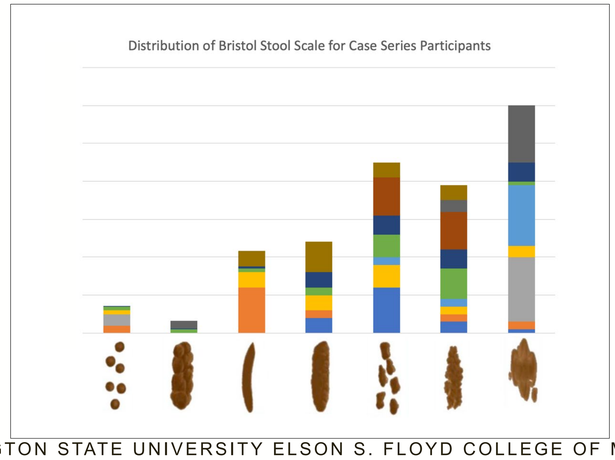
As primer for a quality improvement initiative, a case series analysis of Veterans seen at a newly-established IBS Clinic was performed to better understand the patient population and their preceding diagnostic workup. Data points were retrieved from the VA Electronic Health Records and a standardized IBS Clinic intake form. All charts were comprehensively reviewed to determine the dates of gastrointestinal (GI) symptom onset, first functional GI disorder diagnosis, first IBS diagnosis (if applicable), as well as basic demographics, current comorbidities and medications. Descriptive analytic methods were then applied.

Results

Patient Demographics	Median (IQR) or n/N (%)
Age, years	43 (39-48)
Male sex	11/11
Race/Ethnicity	
White	9/11 (81.8%)
Asian	1/11 (9.1%)
Unspecified	1/11 (9.1%)
Hispanic/Latino	0/11
Branch of service	
Navy	5/11 (45.5%)
Army	4/11 (36.4%)
Marine Corps	2/11 (18.2%)
Period of service	
Persian Gulf War	8/11 (72.7%)
Post-Vietnam	2/11 (18.2%)
Vietnam Era	1/11 (9.1%)
Service Connection, % disabled (n=10)	90 (57.5-100)
Number of comorbid conditions	10 (6-15)
Number of oral medications	9 (5-10)

Results (continued)

Patient GI History and IBS Clinic Presentation	Median (IQR)or n/N (%)
Years from symptom onset to first functional gastrointestinal disorder diagnosis (n=9)	4 (2.5-14.5)
First functional gastrointestinal disorder diagnosis (n=9)	
IBS-D	3/9 (33.3%)
IBS-M	2/9 (22.2%)
IBS-U	1/9 (11.1%)
Functional diarrhea	2/9 (22.2%)
Chronic diarrhea	1/9 (11.1%)
Years from symptom onset to IBS diagnosis (n=7)	9 (3-15)
IBS phenotype (n=7)	
IBS-D	4/7 (57.1%)
IBS-M	2/7 (28.6%)
IBS-U	1/7 (14.3%)
IBS-Symptom Severity Score (n=10), 0-500	270 (206-367)
Moderate (175-300)	6/10
Severe (300-500)	4/10
Hospital Anxiety and Depression Scale-Anxiety (n=10), 0-21	9.5 (6.8-16.8)
Normal (0-7)	3/10
Borderline abnormal (8-10)	4/10
Abnormal (11-21)	3/10
Hospital Anxiety and Depression Scale-Depression (n=10), 0-21	4 (1.8-14.5)
Normal (0-7)	6/10
Borderline abnormal (8-10)	0/10
Abnormal (11-21)	4/10
General Practice Physical Activity Questionnaire (n=10)	
Active	3/10
Inactive	7/10
Most bothersome symptom(s) (n=10)	
Diarrhea	4/10
Constipation	1/10
Cramps	6/10
Gas/bloating	3/10
Urgency	3/10
Frequency	2/10
Incontinence	1/10
Perceived incomplete evacuation	1/10
Hemorrhoids/rectal bleeding	2/10
Borborygmi	1/10
Red flag symptoms (n=10)	
Nocturnal symptoms	4/10
Blood in stool	3/10
Unintentional weight loss	1/10



Results (continued)

Patient Prior GI Workup	n/N
Completed celiac disease testing	4/10
Completed fecal calprotectin or lactoferrin testing	3/10
Completed c-reactive protein testing	4/10
Avoided fecal ova or parasite testing	8/10
Completed colonoscopy if red flags and/or over 50 years old	9/10
Completed colonoscopy if *no* red flags and/or under 50 years old	1/10

Future Directions

IBS is understudied in Veterans. Many patients have psychological comorbidities and take medications which may contribute to their symptoms. While some aspects of their workup aligned well with guidelines, others did not. From this case series, a protocol will be developed for use at our single center. This will aid in analyzing patients' prior diagnostic and treatment regimens and monitor clinician compliance to the current standard of care in the future. Ultimately, further efforts are needed to improve diagnosis and management of Veterans with DGBI in both primary care and gastroenterology services.

Disclaimers

These activities were deemed to be a part of a quality improvement project by the Associate Chief of Staff of the VA Sierra Nevada Health Care System. They were a non-research, operational activity, so informed consent was not necessary, and patients were not contacted. Contents do not represent the views of the U.S. Department of Veterans Affairs or the U.S. Government.

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