Characteristic	Standard Ileostomy Output n=84 (81%)	High Output Ileostomy n=20(19%)	p value
Age, years (mean,SD)	44.1 +/- 17.5	53.5 +/- 15.1	0.03 *
Gender, male n(%)	46 (55%)	17 (85%)	0.02 *
Race, n(%)			
White	68 (81%)	12 (60%)	0.07
Black	10 (12%)	6 (30%)	
Other	6 (7%)	2 (10%)	
Indication for Surgery, n(%)			
IBD	73 (87%)	11 (55%)	0.003 *
Cancer	4 (5%)	5 (25%)	
Other	7 (8%)	4 (20%)	
Surgical Aproach, n(%)			
Laparoscopic	57 (68%)	9 (45%)	0.07
Laparotomy	27 (32%)	11 (55%)	
Other Variables,n(%)			
Prior Chemotherapy	2 (2%)	5 (25%)	0.04 *
Prior Radiation	2 (2%)	3 (15%)	0.04 *
Immunosupression	58 (69%)	6 (30%)	0.002 *
HTN	16 (19%)	9 (45%)	0.02 *
Emergency	7 (8%)	4 (20%)	0.22
Anemia (hb <11g/dl)	16 (19%)	8 (40%)	0.07
Albumin, g/dl(mean,SD)	3.45 +/- 0.7	2.93 +/-0.6	0.004 *

* Statistically Significant ($p < 0.05$)

Su2028

Pinaverium Bromide Plus Symeticone Interacts With the IL-8 +396 GG Variant in the Improvement of Abdominal Pain in IBS. A Report From the Mexican IBS Study Group

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Background: IBS is a functional gastrointestinal disorder with a high placebo response; however, Pinaverium bromide 100 mg + Symeticone 300 mg bid (PB+S) has shown to improve the severity of abdominal pain and bloating.1-2 Recently, increased IL-8 concentrations have been found in intestinal segments of IBD compared with non-inflamed IBS mucosa,3 and according to our findings, lower IL-8 concentrations are present in unstimulated-cultured PBMCs in IBS vs. controls.4 Additionally, IBS has been associated with the IL-8 intronic variant GG at +396 (rs2227307).5 These results suggest that this cytokine may be related with an inflammatory variant of IBS. Aim: To analyze the association between improvement of abdominal pain in IBS patients treated with PB+S and IL-8 variant rs2227307. Methods: Two-hundred and seventy nine patients with active IBS were randomly allocated to PB+S (n=104) or placebo (n=109), in a 3-month double-blind clinical trial. A 10-cm VAS was used to evaluate the severity of abdominal pain. The rs2227307 was analyzed by QPCR. MANOVA analysis for repeated measurements adjusted by gender, age, BMI and IBS subtype, was performed. A priori multiplicative interaction was considered significant if $p < 0.20$ and for main effects if $p < 0.05$. Results: Mean (+/-SD) age of the population was 36 (+/-9) years and mean BMI 26.5 (+/-5.3). Allele frequencies were T=0.63, G=0.37 and genotypes TT= 38.7%, TG= 48.4% and GG=12.9%. The sample was in HW equilibrium (X2= 0.38, p= 0.54). Abdominal pain improved in patients with the three genotypes with a size effect of 34% (favoring PB+S p=0.004). The larger size effect was in those with GG (70.5%, interaction with treatment p=0.18). Conclusions: This study shows that patients with the rs2227307 do not have the same magnitude of response to placebo compared to those with the other genotypes. We hypothesized that an underlying inflammatory-variant of IBS may be more responsive to PB+S. An effect on mucosal immunological mediators and/or epithelial permeability needs to be elucidated. This study was supported by Takeda-Mexico. References: 1.Schmulson M, et al. Gastroenterology 2011;140(Suppl.1):M1327. 2.Remes-Troche JM. Gastroenterology 2011;140(Suppl.1):M1332. 3.Nielsen OH, et al. Gastroenterol. 1997;32:1028-34. 4.Rodriguez-Fandiño O et al. Submitted to DDW 2013. 5. Romero-Valdovinos M et al. Mol Biol Rep. 2012 Sep;39(9):8837-43.

Su2029

Risk Factors for Development of Irritable Bowel Syndrome Six Months After Gastroenteritis With Campylobacter Concisus: Role of Psychometric Scores At Baseline

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Background: Post-infectious irritable bowel syndrome (IBS) following campylobacteriosis is well recognized although the mechanisms and risk factors are poorly understood. Gastroenteritis with Campylobacter concisus is an emerging infection, which appears to be frequent in population-based cohort studies of adults with diarrhoea. Methods: In a prospective, community-based study of unselected adult cases of acute gastroenteritis we examined 8,939 fecal samples from 6,432 patients for pathogenic enteric bacteria including C. concisus. We identified 315 cases of mono-infection with C. concisus and 380 cases of mono-infection with C. jejuni/coli. Patients were invited to participate in a questionnaire study on demographic, clinical, and psychometric variables of which 213 (68%) patients with C. concisus and 256 (67%) patients with C. jejuni/coli gave informed consent. The questionnaire was mailed to the patient at baseline and after 6 months. Information on symptoms of IBS as well as on psychometric scores of anxiety, depression and somatisation in a validated Hospital Anxiety & Depression Scale were included. Patients with pre-existing IBS at baseline were censored. Association between anxiety score at baseline and after 6 months was tested by Spearmans rank correlation. Modified Poisson regression analysis was used to estimate relative risks (RR) and 95% confidence intervals (CI) for IBS as the primary outcome. Results: Development of IBS was reported in 30/121 (25%) of patients with C. concisus infection and in 31/163 (19%) of C. jejuni/coli patients. IBS cases were predominantly females (74%) compared to non-IBS cases (51%). Baseline predictors for IBS in C. concisus infection was high anxiety score (RR 2.21; 95% CI 1.22-4.02, $P < 0.01$), high depression score (RR 2.08; 95% CI 1.04-4.13, $P < 0.05$), chills (RR 2.03; 95% CI 1.10-3.73, $P < 0.05$), nausea (RR 7.18; 95% CI 1.79-28.8, $P < 0.01$), abdominal pain (RR 3.37; 95% CI 1.09-10.43, $P < 0.05$), and muscle aches (RR 3.23; 95% CI 1.50-6.98, $P < 0.01$), whereas length of diarrhoea and bloody stools not were associated with IBS risk. We found a high correlation between baseline and 6 months anxiety scores ($r=0.61$, $P < 0.0001$). We confirmed previous reports that anxiety (RR 2.37; 95% CI 1.24-4.52) is a predictor for IBS following C. jejuni/coli gastroenteritis. Conclusion: Acute gastroenteritis with C. concisus is an emerging infection in adults and a high prevalence has been reported in unselected population-based studies. The infection is followed by a 25% risk of IBS at 6 months follow-up. Risk factors for IBS are nausea, abdominal pain, chills and muscle aches in the acute stage as well as pre-existing high psychometric scores for anxiety and depression. These findings extend earlier studies on C. jejuni/coli and suggest a role of psychological factors in development of post-infectious IBS.

Su2030

New Onset Irritable Bowel Syndrome in the Millennium Cohort Study: An Assessment of Deployment and Non-Deployment Related Risk Factors

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BACKGROUND: Military personnel returning from deployment are at risk for chronic disorders. Functional gastrointestinal disorders (FGID), the most common GI conditions diagnosed by gastroenterologists and primary care physicians, are higher in deployed Veterans, though studies evaluating the relative contribution of risk factors, including stress and infectious gastroenteritis (IGE) are limited. We examined risk factors for new-onset irritable bowel syndrome (IBS) among active duty participants in the military Millennium Cohort Study (MCS). METHODS: Medical encounter (ME) data from 2001-2009, limited to Cohort members on active duty at baseline, were utilized to identify incident IBS cases (any and highly probable). IGE was identified using ME or self-report data from the Post-Deployment Health Assessment. Data on covariates were obtained from MCS surveys. Multiple logistic regression was used to calculate odds ratios (OR) and 95% confidence intervals (CI). RESULTS: Among 46,351 MCS personnel meeting the study eligibility criteria, 409 new-onset cases of IBS (80, highly probable) were identified. Significant risk factors (OR, 95% CI) included being female (2.29, 1.83-2.86), number of life stressors (1: 3.74, 2.95-4.76; 2: 6.38, 4.61-8.83; 3 or more: 20.01, 13.95-28.69), and anxiety (1.66, 1.11-2.48). Factors associated with decreased IBS risk included non-white race (Black non-Hispanic: 0.72, 0.53-0.97; Other: 0.71, 0.53-0.95), Army service branch (0.70, 0.55-0.90), married (0.60, 0.47-0.76), or previously married (0.30, 0.20-0.44), moderate (0.72, 0.58-0.88) or heavy alcohol (0.57, 0.37-0.86) use, overweight (0.74, 0.59-0.92), or obese (0.56, 0.41-0.76), and screening PTSD+ (0.46, 0.30-0.72). Deployment decreased risk of highly probable IBS (1: 0.42, 0.23-0.78; 2+: 0.42, 0.21-0.86). Antecedent IGE resulted in a non-significant increase in IBS risk (1.18, 0.90-1.56). Limited to highly probable IBS, independent IGE risk strengthened, particularly with ME-based IGE (1.31, 0.60-2.88). Significant interactions between IGE and stress or depression were also identified. CONCLUSION: These results confirm previous studies on socio-demographic and life stressors associated with IBS. The decreased IBS risk with PTSD contrasts prior research in female Veterans, as does the inverse association with alcohol use. IGE was not significantly associated with IBS risk; however, non-differential exposure misclassification likely biased effect estimates to the null. Whether deployed or not, US service members often encounter repeated exposure to high levels of stress which combined with other environmental factors, such as IGE, may result in long-term debilitating functional GI disorders. Given the underdiagnosis of FGID in this population, prospective studies with active FGID assessments are needed to better characterize the epidemiology in returning Veterans.

Su2031

Postinfectious Irritable Bowel Syndrome and Functional Dyspepsia Following an Outbreak of Tap Water Contamination

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Introduction: A subgroup of irritable bowel syndrome (IBS) and functional dyspepsia (FD) patients develops symptoms following an episode of infectious gastroenteritis (IGE). Here, we prospectively studied a cohort of subjects exposed to contaminated drinking water and evaluated the risk factors to develop PI-IBS and PI-FD. Methods: In December 2010, an area with a population of 18.398 was affected by an outbreak of acute infectious gastroenteritis (IGE) following contamination of the drinking water with a mixture of norovirus, Giardia lamblia and Campylobacter jejuni. All inhabitants were requested by mail to complete a survey questionnaire (demographics, ROME-III criteria and bowel habits before, during and after outbreak, psychological profile) within 0-3 months and one year after the outbreak. IGE was defined as onset of self-reported acute gastrointestinal discomfort within 2 weeks after tap water contamination. ROME-III criteria were applied to diagnose the presence of IBS or FD before and one year after the contamination. Children (age <18 years) and subjects fulfilling ROME III criteria for IBS and FD before the contamination were excluded