studies suggest poor outcome for patients treated with antibiotics, and *in vitro* studies demonstrate increased toxin release from STEC strains cultured with antibiotics below their inhibitory concentrations. To determine whether antibiotic therapy alters the course of STEC infection, we studied Trimethoprim sulfamethoxagole (TMS) in an animal model. Rabbits were challenged with *E. coli* strain RDEC-H19A, an attaching/effacing rabbit pathogen expressing Stx-1 which induces hemorrhagic colitis. After 3 days of infection animals were treated with TMS by NG gavage BID, or were untreated. The protocol was designed to model the likely clinical use of antibiotics in STEC infection beginning to manifest clinical signs. Animals were observed for diarrhea, wt. loss and shedding of RDEC-H19A, then sacrificed on day 4 of antibiotics to determine RDEC-H19A colony counts, Stx activity in cecal contents, and for histopathologic analysis of cecal sections for inflammation, edema, vascular lesions and bacterial adherence.
Results: All animals lost weight in the first 3 days after challenge. Untreated animals continued to lose weight, whereas those receiving TMS, ($p = 0.003$) gained weight with therapy. 2 deaths occurred in untreated animals, but none in the treated group. Diarrhea was more severe and of longer duration in the untreated group. There was no difference in cecal colonization by the challenge strain between the groups, but mucosal bacterial adherence and the concentration of free Stx-1 were reduced in the TMS treated group. Histopathologic analysis revealed no difference in the degree of vascular lesions, inflammation or edema in the cecum.
Summary: Administration of TMS in an animal model of STEC infection reversed the diarrhea and wt loss associated with infection and reduced the amount of free Stx-1 in the intestinal lumen and adherent bacteria. Inflammation and vascular lesions scores were not influenced by antibiotic therapy.
Conclusion: In this animal model of STEC infection, antibiotic administration appeared to have beneficial effects on the clinical course of the colitis without evidence of increased vascular lesions.

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Pinaverium bromide a GI selective calcium antagonist diminishes FOS expression in rats following nociceptive stimulus

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Purpose: To study the preventive effect of Pinaverium Bromide (PB), a selective GI L-type Ca2+ antagonist, on nociceptive Acetic Acid ip injection by spinal Fos expression in rats.
Methods: 0.6% ip AA rats pretreated either ($n = 5$) with PB (100 mg/kg/day intragastrically for 3 days) or with vehicle ($n = 7$). 60 minutes after ipAA, rats were perfused and 30 micrometer consecutive frozen sections of the spinal cord were cryostat cut in the thoracolumbar segment and processed for Fos immunohistochemistry.
Results: In vehicle pretreated rats, AA induced Fos-IR (mean number of Fos positive cells on hemi-section) in superficial layers (lamina I; 10.2 ± 0.3), in deeper layers (laminae V, 3.5 ± 0.5 and VII, 5.3 ± 1.3) of the dorsal horn and in area X (2.9 ± 0.5). These neurons were predominantly concentrated on the site ipsilateral to the injection side. In PB pretreated rats, a significant decrease (30%; $P = 0.001$) of the Fos count was observed only in the superficial dorsal horn (lamina I; 7.1 ± 0.5).
Conclusions: ipAA increases Fos expression in the thoracolumbar segment, in laminae I, V, VII and in area X, all known to receive visceral afferent fibers. PB pretreatment 100 mg/kg by the therapeutic route (per os) for 3 days significantly decreases Fos expression in Lamina I which principally contains specific nociceptive neurons among other substance P containing neurons. PB selectively impairs the visceral nociceptive stimulus processing, possibly via the implication of capsaicin-sensitive afferent neurons, as it was previously shown that PB effect on postprandial activity was abolished after capsaicin. Very recent new findings on capsaicin have shown its key role in the understanding of the nociceptive pathway. Our study confirms that Pinaverium Bromide, in addition to its effect on motility, exerts also an effect on visceral sensitivity which further supports its beneficial use in Irritable Bowel Syndrome (IBS).

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Physician gender may influence prevalence of IBS patients in primary care physician practices and referrals to gastroenterologists

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Purpose: Irritable bowel syndrome (IBS) is a common gastrointestinal disorder. Individuals with IBS often seek medical attention from primary care physicians (PCPs). This study evaluated primary care physicians' reported prevalence of IBS patients in their practices and the frequency of referrals to gastroenterologists.
Methods: An anonymous questionnaire was distributed to PCPs. A database was developed and analyzed using Epi Info (version 6). Statistical significance was determined with contingency tables which generated Chi-square and p-values.
Results: The anonymous questionnaire was distributed to and completed by 70 (32 male, 38 female) PCPs. 33 (47%) PCPs (10 male, 23 female) reported that 25–49% of their patients had IBS. Female PCPs reported significantly more IBS patients in their practices ($p = 0.017$) than male PCPs. Nineteen (27%) PCPs (14 male, 5 female) reported that 25–49% of their IBS patients were referred to a gastroenterologist. Significantly more male PCPs referred IBS patients to a gastroenterologist ($p = 0.008$) than female PCPs. (Table)

IBS Referrals	All PCPs	Male PCPs	p-value	Female PCPs
75–100%	3	0		3
50–74%	15	8		7
25–49%	19	14	0.008	5
1–24%	28	7	0.003	21
0%	5	3		2

Conclusions: Irritable bowel syndrome is frequently seen by primary care physicians. Female primary care physicians report a significantly higher prevalence of IBS patients in their practices and report referring IBS patients to gastroenterologists less frequently than male primary care physicians. Further study of the relationship between physician gender and IBS management is warranted.

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Physician perception of irritable bowel syndrome diagnosis and management in female and male patients

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Purpose: Irritable bowel syndrome (IBS) is a common gastrointestinal disorder which is more frequently diagnosed in women. Management of IBS is often challenging and can require a multifaceted therapeutic approach. This study evaluated physicians' perception of the ease of IBS diagnosis and management in female and male patients.
Methods: An anonymous survey of primary care physicians' (PCPs) perception of the ease of IBS diagnosis and management was administered. Analysis based upon patient gender was conducted. A database was developed and analyzed using Epi Info (version 6). Statistical significance was determined with contingency tables which generated Chi-square and p-values.
Results: Sixty primary care physicians (30 male, 30 female) were administered and completed the anonymous survey. It was reported that IBS was more common in female patients compared to male patients ($p = 0.00001$). PCPs reported that IBS was easy (6%), somewhat easy (26%) or not easy (66%) to diagnose in female patients. PCPs reported that IBS was easy (6%), somewhat easy (61%) or not easy (31%) to diagnose in male patients. There was a statistically significant difference in female IBS patients being reported to be not easy to diagnose when compared to male IBS patients.