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Emerging Parasitic Infection Mimicking Functional Bowel Disease

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null-anti-enteric neuronal antibodies. Moderate levels of anti-ro 52000 MW antibody were present also in IBS serum. Anti-ro 52000 is a known biomarker for Sjögren’s syndrome. The ray assay did not find these antibodies in serum in which our immunostaining assay found small nuclear ribonuclear polypeptide A were present in high titers in serum that complex containing both protein and RNA molecules (i.e., a ribonucleoprotein complex). There was no anti-enteric neuronal antibodies. The significantly increased long-term prevalence of anti-ro and non-GI symptoms in fructose intolerance suggests the involvement of increased intestinal permeability and/or immune activation requiring further study.

Effect of Traditional Japanese Medicine Daikenchuto (TJ-100) in Patients With Chronic Constipation

Akiro Horiuchi, Yoshiko Nakayama

Objective: In Japan a traditional herbal medicine Daikenchuto (TJ-100) has been commonly used for uncomfortable abdominal symptoms in patients with irritable bowel syndrome and chronic constipation. This study was to compare the effect of a stimulus laxative alone and in combination with TJ-100 in patients with functional bowel disorder and abdominal pain in patients with chronic constipation. Patients and methods: All subjects who were enrolled in this study fulfilled the following; 1) they were taking a stimulant laxative, 2) they had abdominal symptoms including bloating, abdominal pain, and 3) without the laxatives, the bowel movements were less than 3 times per week, 4) coloscopy was normal, and 5) they had no history of abdominal surgery. The study period was 12 weeks and consisted of 4 weeks (pretreatment phase) before the administration of TJ-100, 6 weeks (treatment phase) for the administration of TJ-100, and 2 weeks (washout period) after cessation of TJ-100. The dose of TJ-100 used in this study is either 7.5 g/day or 15 g/day. The bowel movement frequency and the dose of sennosides required were recorded. Both bloating and abdominal pain were evaluated using visual analogue scale score. Abdominal symptoms were evaluated on a standard Gastrointestinal Symptom Rating Scale. The gas volume score was measured at 0, 1, 2, and 3 week and 6 week using the method described by Koide et al (Am J Gastroenterol 2000; 95:1735-41). Results: The addition of TJ-100 to sennosides resulted in significant improvement in bloating (P<0.01) and abdominal pain (P<0.05). Its effects for abdominal pain were dose responsive. There was no significant change in frequency of bowel movements or the dose of sennosides used. The gas volume score was significantly decreased after the addition of TJ-100 (P<0.05). Conclusions: The addition of TJ-100 reduced bloating and abdominal pain in patients with chronic constipation receiving stimulant laxatives, possibly by decreasing the bowel gas volume.

Fructose and Lactose Intolerance: Association With Atopy and Extra-GI Symptoms

Clive H. Wilder-Smith, Andrea Materna

Introduction: Sugar intolerances are common in patients with functional bowel disorders (FBD), although the prevalence of sugar malabsorption is not dissimilar to that in healthy populations. The association of lactose intolerance with other food intolerance is unclear and would suggest additional disorders, such as increased intestinal permeability and immune activation. METHODS: We prospectively assessed the prevalence of fructose (50g) and lactose (50g) intolerance in 586 Caucasian secondary to tertiary care FBD patients (mean age 42±16y, 431 females, Rome III criteria ) with IBS and CHB breath testing (5 hours) as well as atopy and extra-GI symptoms using detailed questionnaires (during testing and long-term). RESULTS: The prevalence of intolerance in these FBD patients was 76% for fructose and 56% for lactose. In the presence of a food intolerance, the significantly increased long-term prevalence of anti-ro and non-GI symptoms in fructose intolerance suggests the involvement of increased intestinal permeability and/or immune activation requiring further study.

Emerging Parasitic Infection Mimicking Functional Bowel Disease

Javed Yakoob, Wasim Jafri, Mohammad Asim Beg, Zaigham Abbas, Shagufta Naz, Muhammad Islam, Abdullah B. Khalid, Rustam Khan, Zubair Ahmad

Background: Irritable bowel syndrome (IBS) is a functional bowel disorder characterized by abdominal pain and changes in bowel habits. The common symptoms include lower abdominal pain, bloating with alteration of bowel habits that may be described as diarrhea or constipation, and gas volume. The prevalence of IBS in Pakistani population is unclear and would suggest additional disorders, such as increased intestinal permeability and long-term. RESULTS: The prevalence of ileal bypass patients was 76% for fructose and 56% for lactose. In the presence of a food intolerance, the significantly increased long-term prevalence of anti-ro and non-GI symptoms in fructose intolerance suggests the involvement of increased intestinal permeability and immune activation requiring further study.

T1828

Neurogenic Bowel in Persons With Spinal Cord Injury: An Evaluation Using SmartPill® Technology

G. Casadevall, T. Rupesh H. Kothari, Ann M. Spungen, William Bauman, Mark A. Korsten

Introduction: Considering that MMC is a key element in intestinal motility, alterations in the MMC may be responsible for blind loop syndrome, a well-known complication following side-to-side intestinal anastomosis. This study was aimed to investigate the physiological mechanism underlying blind loop syndrome, based on migrating motor complex (MMC) in mouse model. Materials and Methods: Ileal side-to-side bypass anastomosis was performed on female ICR mice. In partial bypass model, contents were allowed to enter both the bypassed segment and distally past the bypassed loop. In total bypass model, proximal portion of the bypass segment was double ligated, not allowing the contents to enter bypassed loop directly. After 2 weeks or 4 weeks of the operation, the ileum containing the bypass loop was harvested and MMCs were recorded at 4 different recording channels (2 at the bypassed segment, and 2 at the non-bypassed segment) and distal to the bypassing site. MMCs were recorded in a 12 hour period. After 2 weeks of partial bypass (N=4), the proportion of orally-propagating MMCs was significantly increased (p<0.002) in the bypassed segment. Bidirectional MMCs were also observed (10%). After 4 weeks of partial bypass (N=4), the propagation direction did not change significantly (p=0.82), as compared to that of 2 weeks after the bypass. Amplitude and AUC of the MMCs decreased significantly after 2 weeks of partial bypass; the decrease of the amplitude became more prominent at 4 weeks but the AUC showed no significant changes compared to that of 2 weeks. In total bypass model at 2 weeks (N=6), bypassed segment had independent MMCs not coordinated to the proximal segment. All of MMCs within the loop propagated abnormally. After 4 weeks of total bypass (N=5), MMCs within the bypassed loop lost temporal relationship or completely disappeared. Amplitude and AUC of the MMCs decreased significantly in total bypass model, both at 2 and 4 weeks compared to the control state. Conclusions: Contractions of ileal tract seem to be required to maintain the amplitude and AUC of the MMCs. Changes in the propagation direction of the MMCs and resultant stagnation of contents in the bypassed loop may be responsible for the development of blind loop syndrome in bypass patients. Since the direction of propagation of the MMCs was maintained in total bypass, blind loop syndrome may be prevented.

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T1832 Methanobrevibacter smithii is Prominent in Stool of Subjects With Constipation Predominant IBS and Methane on Lactulose Breath Test Gene Kim, Stacy Weissman, Jim Y. Chou, Janet Yang, Laura J. Hiwang, Kimberly Low, Christopher L. Yang, Yang, Yang. Methods: Consecutive Rome II IBS subjects presenting for lactulose breath testing were compared to hydrogen only IBS subjects for Ruminococcus and Methanobrevibacter. Results: After completion of breath testing, subjects were asked to provide a fresh frozen stool sample. The control group included subjects with IBS not positive for methane on breath testing. Bloating and abdominal pain were not different between groups. The non-methane subjects (P<0.01) indicating the balance towards significant constipation in methane subjects. Bloating and abdominal pain were not different between groups. The non-methane subjects (P<0.01) indicating the balance towards significant constipation in methane subjects.

T1835 Blastoscytos hominis in Patients With Irritable Bowel Syndrome and Eradication With Nitazoxanide William Stapp

**Purpose:** Blastoscytos hominis (BH) is a protozoan commonly found in the human digestive tract. Surveillance studies from the United States and Europe indicate 11-38% of the population may be infected with this organism. However, the pathogenicity of BH is controversial despite increasing evidence showing the role of this protozoan in digestive disorders.

While some patients with BH may be asymptomatic, recent studies indicate a strong association between irritable bowel syndrome (IBS) and BH infection. There is no drug indicated for treatment of BH, traditional treatment for IBS has been metronidazol. Excellent correlation between the eradication of BH and the resolution of IBS symptoms, (18/22) of the patients and a clinical cure in 86% (19/22) of the patients. There was an excellent correlation between the eradication of BH and the resolution of IBS symptoms, (18/22) of the patients and a clinical cure in 86% (19/22) of the patients.

**Results:**

**Conclusion:** In this study, nitazoxanide was effective for the treatment of Blastoscytos hominis infection. The complete pathogenic role of BH remains unclear, however it should be considered a potential pathogen in symptomatic patients. Double-blind placebo controlled studies are warranted to determine the role of Blastoscytos hominis in patients with IBS.