Question 30 – Week of March 4

A 27-year-old medical student is seen in your office for a 4 year history of irritable bowel syndrome, mixed picture with both constipation and diarrhea. The latter 2 problems are intermittent and well controlled with over-the-counter medications. She uses loperamide and a probiotic when she is diarrhea predominant (which is unusual) and uses a magnesium based osmotic laxative when she is constipation predominant. She continues however to have intermittent crampy abdominal pain in the postprandial period and it is this symptom that adversely affects her quality of life. She denies any systemic complaints such as bleeding, fatigue, weakness, loss of weight, loss of appetite, loss of energy, nausea or vomiting. She has no family history of inflammatory bowel disease, celiac disease or peptic ulcer disease. She has a normal physical exam except for occasion pain on palpation in both right and left lower quadrants. She has never noted any extra intestinal manifestations of IBD such as arthritis or rash.

Her prior workup has included routine laboratory testing and a serum tissue transglutaminase which was unremarkable, an abdominal ultrasound which is equally unremarkable and a colonoscopy with negative biopsies and no evidence of structural abnormalities of the colon to account for her symptoms. The ileum was neither examined nor biopsied. Two years ago an empiric trial of rifaximin was effective in controlling her altered bowel habits and her abdominal pain but only for the 14 days during which she took the medication. Her symptoms returned in full force immediately after stopping this medication and she has not tried this approach again. A trial of a gluten free diet over 5 months was ineffective and she ultimately tired of it. She feels that the persistence of the abdominal pain likely indicates that the colonoscopy done one year ago did not clearly identify the problem and she wishes to undergo that exam again and is also considering obtaining a CT scan of the abdomen to further elucidate the source of her pain. You counsel her otherwise. Of the options below what is the best management for the patient at this time.

A. Obtain a CAT scan of both the abdomen and pelvis with infusion.
B. Proceed with a repeat colonoscopy with ileoscopy to rule out Crohns disease.
C. Start her on the tricyclic antidepressant, desipramine at 25 mg at bedtime.
D. Repeat a 14 day course of rifaximin 400mg PO tid.
E. Start twice-daily hyosamine at 0.375 mg PO bid.

Answer: C

As a persistent and chronic abdominal pain is her main complaint it should be the main focus. Of the antidepressants the tricyclic class has the largest body of literature supporting their efficacy. The most studied of these, desipramine. Tricyclics can reduce pain sensitivity, have analgesic properties, reduce the frequency of nerve impulses caused by alterations in gut distention, and can favorably altered gut motility in the setting of diarrhea. Over time a neuroplastic response may lead to long term remission of symptoms and the ability to discontinue the medication. Desipramine would therefore be the most optimal drug for treating her chronic pain at this time. The fact that her symptoms returned immediately upon discontinuing rifaximin indicates that is quite unlikely that she had a significant clinical response with resolution of a small intestinal bacterial overgrowth syndrome and repeating treatment with this expensive antibiotic would not be indicated at this time. The antispasmodic hyosamine would not offer the potential for long-

term results seen with the tricyclic antidepressants would likely be associated with a greater side effect profile and would have no role in controlling her other irritable bowel syndrome symptoms such as diarrhea or constipation; as a matter of fact it may worsen the latter. Evidence for efficacy of antispasmodics in the treatment of irritable bowel syndrome is lacking. Repeating a colonoscopy with ileoscopy to rule out Crohn's disease would be associated with extremely low diagnostic yield given the" illness script" in this patient with her long duration of symptoms without progression. Likewise a CT scan of the abdomen and pelvis in this patient would be of extremely low yield, associated with a significant radiation exposure and considerable expense. The chances of finding an anatomic source for her pain on CT scan given the duration of the symptoms, the lack of physical exam findings and the lack of other abnormal diagnostic studies contribute to the low yield in this setting and it would be ill advised. Establishment of an effective patient physician relationship would of paramount importance in the management of this young woman.

Reference:

Grover, M. and Drossman, D. Curr Op Pharmacol, 8:715-723, 2008.