## Chronic Diarrhea Resolved: Two Case Reviews

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Patients with refractory chronic diarrhea usually suffer for prolonged time and get frustrated with no cure after going through multiple tests and procedures. Here are two cases of patients whose refractory chronic diarrhea were treated successfully.

The first patient has known Crohn's disease for twenty years with multiple abdominal operations of bowel resections. She has chronic abdominal pain with constant diarrhea more than 10 times every day and sometime even more than 20 times per day. She was admitted to hospital quite frequently for Crohn's disease flare-up but her diarrhea never resolved. Treatment with steroid and antibiotics for possible Crohn's disease flare-up did not help with her diarrhea at all. After reviewing her medical record, it was found that her diarrhea was not caused by the flare-up of Crohn's disease but was caused by bile salt complicated with C. Diff colitis secondary to steroids and antibiotics use. Her treatment plan was changed accordingly and her diarrhea was resolved.

The second patient was a gentleman in his mid thirties with watery diarrhea for 10 years. He had more than 10 times bowel movements per day but he still managed to go to work. He had had extensive work-up with no conclusive diagnosis and nothing worked for his diarrhea. He does not have Crohn's disease or any abdominal surgery. No diagnostic clue was offered from previous work-up with multiple procedures. He had been treated for irritable bowel syndrome-diarrhea type for years with no improvement of his diarrhea. After doing an upper endoscopy and colonoscopy, I found that he had bile salt diarrhea. The patient was treated and his diarrhea resolved. He declines further investigation for the mechanism of his bile salt diarrhea because he is very happy with his current treatment.

Bile salt diarrhea is not a common cause of chronic diarrhea. It usually occurs in patient with Crohn's disease with terminal ileum (TI) involvement, surgical resection of TI or tuberculosis infection of small bowel. It is also possible seen in patient with gallbladder removal but it is controversial. The mechanism for bile salt diarrhea is that a large amount of unabsorbed bile salt in large bowel leads to secretion of electrolyte and fluid into colon and suppression of the absorption capacity of large bowel. These patients can have more than 10 times watery diarrhea per day. If you have chronic diarrhea which is not responding to current treatment, please contact Dr. Jeff Ye, North Atlanta Medical & Digestive Care at 770-346-0900. We can help!