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### Introduction

Bile acid (BA) sequestrants are commonly used in IBD following ileocecal resection to treat bile acid malabsorption and associated abdominal pain and diarrhea. There is less experience with use of BA binders in IBD patients following colectomy and ileoanal pouch reconstruction.

IBD ileoanal pouch patients frequently experience bouts of diarrhea and abdominal pain and have limited treatment options.

We sought to characterize our institutional experience with BA sequestrants to treat abdominal pain and diarrhea in a large cohort of IBD ileoanal pouch patients with a focus on long term therapy and improvement in patient reported outcomes.

## Methods and Materials

We analyzed a prospective, natural history registry of consented IBD patients followed at a tertiary center (2009-2022).

Patients with ileoanal pouch reconstruction following colectomy were identified and individuals with > 2 years of follow up formed the long-term study cohort.

BA sequestrants included cholestyramine, colestipol and colesevelam.

Patient reported outcomes of diarrhea and abdominal pain, recorded at the time of clinic encounters were organized, and mean scores before and after bile acid binder therapy were compared.

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# Long-Term Use of Bile Acid Sequestrants to Improve Diarrhea and Abdominal Pain in IBD Patients With Ileoanal Pouch Anastomosis: **A Tertiary Referral Center Experience**



#### **Comparison between before and after initiation of bile acid sequestrant therapy**

	Before bile acid	After bile acid	Mean		
	sequestrants	sequestrants	Difference	т	df p value
Patient reported outcomes					
Mean number of stools per day	9.02	6.14	2.88	3.5	41 < 0.001
Mean abdominal pain score					
(0=no pain-3=severe pain)	1.21	0.9	0.3	2.4	42 0.017
Health care utilization					
ED visits (mean per year)	1.2	0.94	0.33	2.7	62 0.007
Hospital admissions					
(mean per year)	0.89	0.35	0.55	4.3	62 < 0.001
	Before bile acid	After bile acid			
	sequestrants	sequestrants		p value	
Rates of Elevation of Inflammatory Markers					
CRP	61.20%	58.06%		1	
ESR	39.20%	28.50%		0.5465	
Rates of Medication Use					
Antibiotics	97.70%	84.40%		0.077	
Immunomodulators	16.90%	20.30%		0.7893	
Anti TNF	21.60%	16.60%		0.6056	

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#### References

#### Results

1. Hofmann AF, Poley JR. Cholestyramine treatment of diarrhea associated with ileal resection. N Engl J Med. 1969;281(8):397-402. doi:10.1056/NEJM196908212810801 2. Turina M, Pennington CJ, Kimberling J, Stromberg AJ, Petras RE, Galandiuk S. Chronic pouchitis after ileal pouch-anal anastomosis for ulcerative colitis: effect on quality of life. *J Gastrointest Surg*. 2006;10(4):600-606. doi:10.1016/J.GASSUR.2005.08.013

# LIFE CHANGING MEDICINE



**A:** Friable proximal limb of J pouch before bile acid sequestrants and after bile acid sequestrants

**B**: Ulcerated and friable proximal limb of J pouch before bile acid sequestrants and resolved ulceration and inflammation after

#### Discussion

A majority of IBD ileoanal pouch patients benefitted from BA sequestrant treatment, reducing number of bowel movements and abdominal pain over a >2 year period, with a parallel reduction in healthcare utilization.