over the past five years to characterize use patterns and to determine the utility of EMA testing.

Methods: Retrospective review of celiac panels performed at CHOP between 1/02 and 3/07 was performed to identify all TTG and EMA IgA testing. Electronic medical records were reviewed and clinical information and results of statistical analyses are summarized in tables below.

Results: Overall, 9746 celiac panels were performed in 5890 patients, with 5.7% of patients displaying TTG positivity and 3.8% displaying EMA positivity. Data is analyzed by year and displayed in table below. The mean TTG value in TTG+/EMA- discordant patients (30 ± 17) was significantly lower than TTG+/EMA+ patients (214 ± 252) P < 0.001. TTG+/EMA+ patients were significantly younger (8.8 ± 4.8 yrs) than TTG+/EMA+ (11.5 ± 4.0) and TTG+/EMA- patients (11.4 ± 3.6) P < 0.01. Further analysis revealed a higher rate of TTG-/EMA+ results in 0–4 year old children versus 5–20 year old children.

Conclusion: No major change in positivity rate was observed in the past five years. Not surprisingly, EMA displayed a low sensitivity of 68%, with greater sensitivity seen in higher TTG values. However, in 3.2% of patients, EMA testing was positive in the face of negative TTG testing, particularly in younger children. Despite the extra cost and subjectivity associated with EMA testing, it may improve sensitivity when screening a young child.

Abstracts S551

1186

Use of Rifaximin in Pediatric Patients with Inflammatory Bowel Disease
Pranomda Muniyappa, MD, Reema Gulati, MD, Hupertz Vera, MD*. Pediatric Gastroenterology, Cleveland Clinic, Cleveland, OH and MetroHealth Medical Center, Cleveland, OH.

Purpose: Rifaximin is an antimicrobial approved by the U.S. FDA in 2004. It has poor systemic absorption and in vitro activity against enteric Gram-positive and Gram-negative bacteria making it a reasonable option for GI infections. Adult studies that have been done show promising results evaluating the efficacy of Rifaximin for use in inflammatory bowel disease (IBD). Our aim was to determine if Rifaximin is an option for use in pediatric patients with IBD.

Methods: A retrospective IRB approved study of 23 children ages 8–21 yrs was conducted at the Cleveland Clinic in patients with known diagnosis of IBD. We collected data including the time of diagnosis, extent of disease involvement, previous treatments, more recent treatments and current symptoms. While on Rifaximin, symptom improvement and lag to improvement were evaluated.

Results: Review of the data revealed that of the 23 patients, 12 had Crohn’s and 11 had Ulcerative Colitis with a mean age of 15.08 yrs. The most common complaints were diarrhea (87%), abdominal pain (74%) and bloody stools (65%). Of the 23 patients that were prescribed Rifaximin only 3 were prescribed concurrent steroids. Patients were given Rifaximin at varying doses from 400 mg to 1200 mg per day. Analysis revealed that of the 20 patients that presented with diarrhea 16 had relief of diarrhea within 4 weeks of treatment, 5 within 1 week of starting Rifaximin. In 17 patients that presented with abdominal pain, 12 patients had relief within 4 weeks, 3 of these patients had relief within 1 week. Visible bleeding resolved in 10 of 15 patients within 4 weeks of therapy, 3 of the 10 had improvement within 1 week. Only one patient had a negative side effect of temporary increase in diarrhea symptoms upon starting the Rifaximin.

Conclusion: Rifaximin was well tolerated in our pediatric patients with IBD and showed favorable results. No serious adverse events occurred. Larger prospective studies with standardized dosages are needed to evaluate efficacy and determine optimal dosing of Rifaximin in this population.

1187

Utilization of Nitazoxanide for the Empiric Treatment of Pediatric Diarrhea of Unknown Etiology
Youhanna Al-Tawil, MD*, Alexandra Eidehwein, MD, Clarisa Cuevas, MD, Anthony S. Jackson, PharmD. Childrens Hospital Pediatric Gastroenterology, Knoxville, TN and Department of Medical Science, Romark Laboratories, LC, Tampa, FL.

Purpose: Diarrhea of unknown etiology is a common reason a pediatric patient seeks presents to the office. While there are many reasons pediatric patients develop diarrhea, microbial insult has been targeted as a major contributor to this disease. Parasites, bacteria, and viruses are part of the spectrum of implicated organisms. Since testing for a specific organism

boy-37 girl) by observing obliteration of the Z-line and was confirmed by histopathological changes in esophageal biopsies. There were 8 cases with Barrett’s esophagus all aged more than 6 years with history of suspicious symptoms of GER in infancy and later on. Treatment with prokinetic drugs and PPI or H2 receptor blockers was undertaken. Successful treatment was observed in 96% of all patients 6 months after treatment was initiated and on follow up. Surgical antireflux procedure was performed to patients with no resolution of symptoms after 6 months of therapy.

Conclusion: In conclusion, GER in children with chronic abdominal pain beyond infancy is not rare ant tends to be chronic and severe and such patients are at high risk of developing serious complications without early diagnosis and treatment.