BACKGROUND: A great proportion of Inflammatory Bowel Disease (IBD) patients exhibit persistent gastrointestinal symptoms such as diarrhea and abdominal pain that are not always related to mucosal inflammation. In this setting, irritable bowel syndrome (IBS) is the most frequent superimposed disease. The aim of this study was to identify the characteristics of health services that provide nursing care for IBD patients in Brazil.

METHODS: Patients were enrolled into 4 groups: (i) active IBD patients with chronic diarrhea (more than 3 bowel movements/day) (n = 44); (ii) IBD-BIS patients (defined by q5e mucosal inflammation SES-CD ≥ 2 or Mayo score < 1 and chronic diarrhea) (n = 25); (iii) IBD predominant diarrhea patients (n = 45); (iv) asymptomatic individuals who underwent colorectal screening colonoscopy (n = 46). Exclusion criteria were: other intestinal diseases, previous abdominal surgery or neoplasia, corticosteroids less than 6 months prior to inclusion, HIV infection. All blood samples were collected at the time of colonoscopy and serum levels of anti-CdtB/anti-vinculin antibodies were determined by enzyme-linked immunosorbent assay.

RESULTS: Of 146 subjects the mean age of active IBD patients was 39.5 years, whereas 46.5 years in the overlapping IBD-BIS group, and 39.5 in the IBD group. 53.6% (73/137) of total IBD patients had Crohn’s disease. The mean value of the optical density for anti-CdtB was 0.71 ± 0.48 in active IBD patients, 0.71 ± 0.43 in IBD-BIS patients, 0.70 ± 0.44 in IBD-D group and 0.72 ± 0.72 in controls, but no statistical differences were observed between these groups (p = 0.99). IBD-Health status has a tendency to have higher levels of anti-CdtB 1.68 ± 1.04 when compared to active IBD 1.50 ± 0.81. IBD-D 1.50 ± 0.49 and controls 1.63 ± 0.9, without significant differences (p = 0.76). Considering the cut-off point of 1.56 for anti-CdtB and 1.60 for anti-vinculin reported in literature, the frequency of seropositive cases was, respectively: active IBD n = 3 (6.8%) and n = 21 (27.7%); IBD-BIS n = 0 and n = 12 (48%); IBD-D n = 3 (6.8%) and n = 19 (42.2%); controls n = 5 (10.8%) and n = 23 (50%).

CONCLUSION(S): We did not find distinct levels of either anti-CdtB or anti-vinculin among active or quiescent IBD, IBD-D and healthy controls. Trend for higher anti-vinculin antibodies titers was observed in IBD-BIS. Thus, IBS diagnosis in IBD patients remains cumbersome in clinical practice.

P009 Characterization of Health Services That Provide Nursing Care for Inflammatory Bowel Disease Patients in Brazil

Joseline Barros1, Madhoor Ramdeen2, Julio Baima3, Rubia Alencar4, Rogerio Saad-Hossne5, Luí Barros2, Matheus Azevedo2.

1Children’s Mercy Hospitals and Clinics, Kansas City, Missouri, 2Children’s Mercy Kansas City, Kansas City, MO.

BACKGROUND: Nursing care in inflammatory bowel disease (IBD) is essential to the success of the treatment. IBD patients need continuous and specialized care and the characterization of health services is necessary to identify the deficiencies for further resolution in the future. The aim of the study is to identify the characteristics of health services that provide nursing care for IBD patients in Brazil.

METHODS: A descriptive study was performed. Participants were nurses who treat IBD patients. The identification of nursing care was performed through a survey which was abstracted for the following data: demographic characteristics; duration, extent, and treatment of IBD. The data were collected through an online survey questionnaire consisting of 37 questions that was developed.

RESULTS: 74 nurses were identified. Health services are located in the following Brazilian regions: Southeast (66.2%), Northeast (13.3%), South (9.4%), North (1.2%) and Midwest (10.5%). The most frequent services were public hospital (45.95%), IBD outpatient clinic (25.68%), private clinic (21.62%) and infusion center (10.81%). In the infusion centers were identified emergency trolley (45.95%), bathroom for the patient (43.24%), refrigerator for storing medications (43.24%), comfortable chair for infusion (43.24%) and post nursing (40.54%). Health services are integrated with endoscopical diagnosis service (40.54%), magnetic resonance imaging (52.70%), pathology department (54.07%), urgent and emergency room (58.11%), endoscopy (70.27%), computed tomography (59.46%), surgical inpatient unit (67.57%) and clinical inpatient unit (72.97%). The services have telephone consultation (28.39%) and communication by email (20.27%). The team is composed of nurses (71.62%), coloproctologist (64.8%), gastroenterologist (58.11%), dietitian (56.76%), psychologist (41.89%) and stomatherapist (40.54%).

CONCLUSION(S): Most health services are located in the southeast region; the type of service provided is public with access to specific tests. Infusion centers have the minimum required resources recommended. Some health services feature telemedicine service. The multidisciplinary team is present in most services. These findings suggest the need for prompt expansion and improvement to the delivery of services and care for all IBD patients across the nation.

P013 Successful Use of Combination Biologic Therapy in Medically Refractory Pediatric Crohn’s Disease and Sacroilitis

Julio Barz1, Alka Goyal3.

1Children’s Mercy Hospitals and Clinics, Kansas City, Missouri, 3Children’s Mercy Kansas City, Kansas City, MO.

BACKGROUND: Primary sclerosing cholangitis (PSC) is a chronic and progressive cholestatic disease associated with Inflammatory Bowel Diseases (IBD) in 70% of cases. When combined, they present distinctive phenotypic characteristics that PSC-BIOPA should be considered as a separate entity of more extensive colonic involvement and an increased risk of malignancies. The aim of this study was to assess the prevalence, characteristic features and long-term complications of PSC-IBD patients from a quaternary hospital in Brazil.

METHODS: We retrospectively analyzed all PSC-BID patients registered and followed-up in our center between January 2000 and July 2019. Conventional colonicoscopy and histological criteria were used to diagnose PSC, whereas radiographical or histological criteria for PSC. Medical records were abstracted for the following data: demographic characteristics, duration, extent, and treatment of IBD, duration, extent, and treatment of PSC, colorectal neoplasia (dysplasia and cancer), surgical treatment for IBD, liver transplantation and death.

RESULTS: In total, 84 patients with concurrent PSC and IBD were identified. Of 84 cases, 74 (87%) had Ulcerative Colitis (UC) and 11 (13%) were diagnosed with Crohn’s disease (CD). There was a slight predominance of male, 46 (54%). The mean age at both IBD and PSC diagnosis was 31 and 36 years, respectively. Most of them were diagnosed with IBD prior to PSC. The mean IBD duration was 15 years and 10 years in PSC subjects. The prevalence of pancolitis in UC patients was 80%. All CD cases presented ileocolonic involvement. Present or past smoking history was observed in 4 patients (7.4%). Aminosalicylates were the most common treatment used for IBD in 54 patients (64.3%). 15 of them (18%) were on monotherapy with immunobiologics and 7 patients (8.3%) were on combotherapy. Only 1 subject was on anti-integrin. In our cohort, 55 cases (66.7%) were treated with deoxycholic acid. Colorectal neoplasia and cholangiocarcinoma was observed in 6 (7%) and 2 patients (2.3%), respectively Colorectal dysplasia was found in 12 subjects (22%) on a routine colonoscopy. Overall, 18 patients (21.4%) required protonpondylin and 9 cases (10.7%) have undergone orthotopic liver transplant. There were 12 deaths, mainly PSC and cancer-related.

CONCLUSION(S): This is the largest cohort of concomitant PSC and IBD patients in Latin America. In our center; we have found higher rates of extensive IBD although few of them were on biologics. The present data on cancer and dysplasia are consistent with reports in the literature.
CASE: We present a patient with medically refractory Crohn’s disease, sacroiliitis and growth failure who showed remarkable response to combination therapy using two different biological agents along with an immunomodulator and no significant adverse events. A 14-year-old male presented for 2nd opinion regarding management of refractory ileocolonic Crohn’s disease. He was diagnosed with Crohn’s disease at an outside center at 9 years of age. Initial treatment with systemic steroids and azathioprine was unsuccessful. He had sub-optimal clinical improvement on anti-tumor necrosis factor (TNF) therapy that included infliximab for 1 year, followed by adalimumab for 1.5 years. He subsequently struggled with repeated episodes of Clostridiun difficile (CDI) requiring prolonged vancomycin taper. His therapy was then switched to vedoluzimab, systemic steroids and azathioprine which provided some symptomatic relief, but he was noted to be persistently anemic with elevated inflammatory markers and poor growth. At the time of presentation to our center he was stunted dependent on prednisone 5 mg daily for 6 months while still on vedoluzimab and azathioprine. He had mildly active clinical disease but severe growth failure and was negative for CDI. Repeat disease assessment noted severe granulomatous colitis and terminal ileitis with worsening disease in the distal colon. He was treated with Budesonide MMX and mesalamine enemas with no improvement. Vedoluzimab levels were noted to be low and therefore therapy escalated to every 4-week intervals. Azathioprine was stopped due to lack of efficacy despite adequate levels. Due to body mass index (BMI) z-score of -2.4, exclusive enteral therapy was implemented for 3 months followed by transition to regular diet. His weight improved but there was no change in clinical activity or laboratory abnormalities. He subsequently developed leg and hip pain. Rheumatology evaluation was pursued, and he was diagnosed with sacroiliitis based on physical examination and a lumbosacral MRI. At this point a decision was made to use combination of two biologics due to prior history of GI disease refractory to anti-TNF therapy. Adalimumab and oral methotrexate were given in addition to vedoluzimab. He has been on this combination for last 9 months with no adverse events. Patient has shown excellent clinical response with normalization of inflammatory markers and resolution of anemia. His BMI z-score improved to 0.76 with weight gain of 25 kilograms in the past year. Combination biologics are rarely utilized due to concerns for side effects and high cost making it difficult to obtain insurance approval. When used judiciously in patients with medically refractory disease it can be safe and effective. A paucity of literature exists regarding the use of combination biologics especially in children.

Persistent Disparities in Colectomy Rate in Ulcerative Colitis
Alibahar Bhuwali1, Darren Serin2
1Baylor Scott & White, Dallas, TX; 2Rutgers RWJ Hospital, Cleveland, Ohio.

BACKGROUND: Colectomy is a curative treatment modality for ulcerative colitis (UC). Racial disparities have been described for colectomy in UC patients prior to the advent of anti-tumor necrosis factor (TNF) alpha agents. The goal of this study was to characterize racial and geographic trends in colectomy rates among hospitalized UC patients during the era of anti-TNF alpha agents.

METHODS: A retrospective study was conducted utilizing the 2008–2014 National Inpatient Sample (NIS) database. Included were hospital discharges between the years 2010 and 2014, within the age range of 5–80 years, and with a primary diagnosis of UC identified by ICD-9-CM code of 556.x or primary diagnosis of complication of UC with a secondary or tertiary diagnosis of UC. Hospital administrative data were utilized to derive data for race and ethnicity and categorized into non-Hispanic white, Hispanic, African American, Asian and other. ICD-9-CM procedure code 45.8 was applied to identify colectomy. Colectomy rates, inhospital mortality, and length-of-stay were calculated for non-Hispanic whites, African Americans, and Hispanics. Data were analyzed with the Stata.

RESULTS: The national estimate of the unadjusted colectomy rate among hospitalized UC patients between 2010 and 2014 was 3.90 per 1000 hospitalisation days (95% confidence interval [CI] 3.72–4.08). The crude colectomy rates in African Americans (2.33) and Hispanics (3.99) were significantly lower than that of non-Hispanic whites (4.35, P < 0.001 and P = 0.009, respectively). After multivariable adjustment for confounders, the incidence rate ratio for African American versus whites was 0.43 (95% CI 0.32–0.58, P < 0.001). Medicare insurance was associated with a lower colectomy rate compared to possession of private insurance (3.83 vs 5.17, P = 0.0001). Assessment of colectomy rate by geographic region showed higher rates in the West (4.76) and Midwest (5.12) compared to the Northeast (3.20, P < 0.001 and P < 0.001, respectively).

CONCLUSION(S): The nationwide rate of colectomy among hospitalized UC patients continues to vary significantly by race and geographic region in the era of anti-TNF alpha agents. Our analysis suggests that colectomy rates among hospitalized African Americans and Hispanics were lower than those of non-Hispanic whites during the 5-year period studied. There are multiple possible factors contributing to the observed racial differences in colectomy rates for UC, including differences in access to and utilization of healthcare resources, type of health insurance, and ethnic variation in healthcare literacy and attitudes toward the healthcare facility. Further studies are needed to further elucidate the social and biologic underpinnings of these variations.