in patients with inflammatory bowel disease on different biological therapy.

Results: In total, 387 respondents completed the questionnaire, and 47 participants (12%) developed COVID-19 infection. 66.9% of them were receiving anti-TNF inhibitor, 16.8% vedolizumab, 12.1% ustekinumab, and 4.1% tofacitinib. Based on our cohort, different biologic therapies didn't elevate the risk of infection (p=0.3486), nor the hospitalization rate (p=0.277). No one was in ICU or ventilator, and nobody passed away. Furthermore, 38.3% suspended the current biologic therapy, but it didn't decrease the rate of hospitalization (p=0.533), however, it didn't cause flare-ups either in the primary disease (p=0.415). Based on our cohort, neither vitamin supplementations meant protection against the infection (p=0.117), only regular mask wearing seems to protect patients with IBD (p=0.009).

Conclusion: Based on our cohort, more IBD patients develop the infection in Hungary, compared to international data, however, the outcome of the infection is more favourable. It seems, that the different biological treatments don't affect the infection rate, and neither elevates the hospitalization rate. In generally, there is no need to suspend the current biologic therapy, however, it should be a matter of individual judgment. After all, we claim that mask-wearing still seems to be the most effective form of prevention.

P667

Characterization of a large Hispanic cohort with Inflammatory Bowel Disease across a 25-year span

E.A. Torres*[1], L. Ramos[1], A. Sanchez[1], C. Amaya[2], A. Perez-Gilbe[3]

1University of Puerto Rico School of Medicine, Medicine, San Juan, Puerto Rico, [2]University of Puerto Rico Graduate School of Public Health, Epidemiology and Biostatistics, San Juan, Puerto Rico, [3]AbbVie Corp, Medical Affairs, San Juan, Puerto Rico

Background: Inflammatory Bowel Disease (IBD) in Hispanics has increased, but characterization of this population is limited. We describe the demographic and clinical characteristics of a large Hispanic population with IBD and compare it among two periods, 1995- 2009 and 2010–2019.

Methods: The Registry of IBD has been recruiting patients with IBD continuously since 1995. Data is obtained from the subject and the medical record. This study includes 1365 Hispanics recruited between 1995 and 2019. Variables include age, gender, age at onset and diagnosis, IBD type, family history, smoking, extraintestinal manifestations (EIM), medications, and surgery for IBD. Descriptive statistics included frequency, median, mean, and standard deviation. SPSS software was used for comparison analysis utilizing Chi square and Fisher´s test. The protocol is approved by the IRB.

Results: 712 were males and 653 females. Crohn's disease (CD) was more prevalent in males (479/836, 57.3%) and ulcerative colitis (UC) in females (288/517, 55.7%). The mean age at diagnosis was 34.1 + 15.4 for UC and 24.4 + 12 for CD (p<.001). History of smoking was infrequent (24.3%). Interval between onset of symptoms and diagnosis was 1.8 + 4.7 yrs. for UC and 2.5 + 5.3 yrs. for CD (p=.012). At recruitment, duration of disease was 7.4 + 8.4 yrs. for UC and 5.6 + 7.3 yrs. for CD (p<.001). Family history of IBD was present in 23% of CD and UC participants. The most frequent EIM was arthropathy in 37.9% and 25.9 % of UC and CD (p=.670), followed by skin manifestations in 13.2% and 18.9% respectively (p=.070). Aminosalicylates (94.9%) and corticosteroids (81.6%) were more frequent in UC, and immunomodulators (23%) and anti-TNF drugs (aTNF) (46.2%) in CD (p<.001). At the time of recruitment, 54.5% of CD and 23.7% of UC patients had previous surgery for IBD.

Stratification of subjects into two groups by date of recruitment,1995–2009 and 2010–2019, showed similar ages at onset and diagnosis, but the time to diagnosis decreased for UC (2 vs 1.55 yrs.) and increased for CD (2.2 vs 2.6 yrs.) in the later interval. Medications varied between decades, with aTNF increasing markedly in CD and UC (p<.001) and aminosalicylates decreasing in CD (p<.001) in the later years. Surgery for UC decreased from 25.2% to 20.7%, whereas surgery for CD remained the same (52.2% vs 52.5%).

Conclusion: We describe a large cohort of Hispanics with IBD studied over two decades. Differences over time may reflect changes in disease phenotypes, environmental influences and the impact of physician awareness and new management guidelines and therapies. Further studies are needed to better characterize this population and explore outcomes.

P668

Does biotin deficiency play a role in the pathogenesis of Inflammatory Bowel Disease? Preliminary results of a cross-sectional study

J. Erbach[1], A. Arnold[2], F. Bonn[2], J.M. Stein[1,3,4], O. Schröder[1,3], A. Aksan*[1,5]

[1]Interdisciplinary Crohn Colitis Centre Rhein-Main, Clinical Research, Frankfurt am Main, Germany, [2]Immundiagnostik AG, LC/MS Department, Bensheim, Germany, [3]DGD Clinics Frankfurt-Sachsenhausen, Gastroenterology and Clinical Nutrition, Frankfurt am Main, Germany, [4]Goethe University Frankfurt, Institute of Pharmaceutical Chemistry, Frankfurt am Main, Germany, [5]Justus-Liebig University Giessen, Institute of Nutritional Science, Giessen, Germany

Background: Biotin, a water-soluble B-vitamin, has been shown to have anti-inflammatory properties. A biotin-deficient diet was recently shown to induce a colitis-like phenotype in mice, alleviated by biotin substitution. Mice with DSS colitis showed biotin deficiency and significantly reduced levels of SDMT, a protein involved in biotin absorption. Oral biotin substitution reversed DSS colitis and induced remission by inhibiting NF-κB, a transcription factor that hinders inflammatory cytokine expression and plays a role in intestinal barrier integrity and IBD. We investigated for the first time a possible clinical role of biotin status in IBD.

Methods: In a comparative, cross-sectional study, serum samples of IBD patients were compared with samples of 80 healthy blood donors (40f;18-65y). CBC, albumin and hsCRP were determined by standard tests and samples assessed for presence/absence of inflammation (serum hsCRP, cutoff <5mg/L). Since its known that serum biotin levels does not accurately reflect biotin status, serum 3-hydroxyisovaleryl carnitine (3HIAc) levels were determined by LC-MS/MS.

Results: 138 IBD patients (67f;72 CD/66 UC;42.5±14.3y) were enrolled. Of these, 83/138 had inflammation (39f;43CD/40UC;42.5±14.6y) and 55/138 no inflammation (28f;29CD/26UC;42.5±13.9y). In IBD patients, mean serum 3HIAc levels were significantly higher vs. controls but similar with vs. without inflammation (Table 1). The reference serum 3HIAc level