with non-therapeutic levels had simultaneously positive antibodies, and of the remainder, 27.3% acquired antibodies in a subsequent analysis. It was found that patients with non-therapeutic levels had significantly higher fecal calprotectin values at the initiation of treatment with infliximab (1184 ± 679 vs 708 ± 612, P = 0.02). No statistically significant association was found with other analytical parameters, including hemoglobin (12.7 ± 17 vs 12.9 ± 16, P = 0.53), C-reactive protein (11.2 ± 12.3 vs 15.9 ± 20.0, P = 0.22), sedimentation rate (22.4 ± 20.7 vs 23.7 ± 19.3, P = 0.76), ferritin (138.3 ± 128.2 vs 165.3 ± 166.6, P = 0.42) or albumin (3.50 ± 0.45 vs 3.56 ± 0.47, P = 0.54).

CONCLUSION(s): Patients with non-therapeutic levels of infliximab have higher values of calprotectin prior to treatment, which may be related to increased inflammatory activity. In these cases infliximab regimens with higher and/or more frequent doses may be considered.

PO28

The Use of Combination Biologic or Small Molecule Therapy in Inflammatory Bowel Disease: A Retrospective Cohort Study

Kerry Glasmeyer1, Ayah Oglat2, Antonio Duran3, Pramoda Koduru4, Caroline Perry5, Amanda Wilhite5, Bincy Abraham4.

1Houston Methodist Hospital, Houston, TX; 2UC San Diego, San Diego, CA.

BACKGROUND: There is limited data on the use of more than one biologic or small molecule in the treatment of patients with inflammatory bowel disease (IBD). The aim of our study was to determine the effectiveness and safety of combining two or more biologics or a biologic and small molecule in patients with IBD.

METHODS: We collected data on 50 patients with Crohn’s disease (CD) or ulcerative colitis (UC) who received treatment with a combination of two biologics or a biologic and small molecule from 2015 to 2019 for persistent disease activity or concomitant rheumatologic or dermatologic disease. Combining biologics or small molecules was done to achieve remission or lower disease activity, or to improve response to treatment. There were statistically significant differences in remission rates between patients receiving combination biologics or combination biologics and small molecules as compared to those receiving monotherapy. The most common treatment combinations consisted of combination biologics and were infliximab with adalimumab (n = 4), anti-TNF (IFX, GOL) and vedolizumab (n = 4), vedolizumab (VZD) and ustekinumab (UST) (n = 3). There were no cases of infusion reactions among those receiving combination biologics. Endoscopic improvement was seen in 17/50 (34%) patients in the combination therapy group and 10/50 (20%) patients in the monotherapy group.

CONCLUSION(S): Combination therapy is an effective option for IBD patients with refractory disease or concomitant autoimmune disease inadequately controlled by biological mono-drug therapy. There appears to be an increased risk of serious infection compared to biological mono-drug therapy, however this risk may be minimized by discontinuing immunomodulators prior to initiation of combination therapy. Larger prospective studies are needed to confirm these findings.

PO31

Re-Initiation of Anti TNF Agents After a Drug Holiday or Disease Relapse in Inflammatory Bowel Diseases: A Systematic Review

Shadi Hamdali1, Mohamad Kalor1, Laith Numae2, Yaser Aleya3, Reem Moustafa1, Moutaba Oubay1.

1University of Kansas Medical Center, Kansas City, MO; 2University of Missouri at Kansas City, Kansas City, MO; 3Ammerland Klinik Weisteide, Weisteide, Germany; 4KUMC, Kansas City, MO.

BACKGROUND: Inflammatory bowel disease is a chronic condition that usually requires life-long treatment, with approximately one third of patients relapsing within 1 year after discontinuation of medication. It is still not clear whether it’s safe and effective to start anti-TNF agents after a drug holiday, with some studies showing benefit but others not. Therefore, we conducted a meta-analysis of studies that looked at restarting anti TNF medications after a drug holiday, to discern whether this can lead to clinical response/remission or not.

METHODS: A comprehensive search of several databases including Ovid MEDLINE Epub Ahead of Print, Ovid Medline In-Process & Other Non-Indexed Citations, Ovid MEDLINE, Ovid EMBASE, Ovid Cochrane Central Register of Controlled Trials, Ovid Cochrane Database of Systematic Reviews, and Scopus was performed up to September 15, 2019. Two independent reviewers systematically identified trials that looked at restarting anti TNF drugs after a drug holiday. A meta-analysis was performed using a random effect model to assess the outcomes of clinical remission after re-initiation of anti TNF.

RESULTS: Total of 17 studies with 918 patients retreated with anti TNF medications after a drug holiday (2 studies) due to disease relapse (15 studies) met our inclusion criteria and were ultimately included in the final analysis. The remission rate of patients retreated with biologics was abstracted from 17 studies. A binary random effects model was used to pool the proportions of remission from all studies. The pooled rate for remission in those patients was 82.3% (76.7%–87.7%), however we found a serious inconsistency among studies with an I2 value of 79.3%. Additionally, although some of the estimates in individual studies do not fall within the confidence interval of the estimates in the other studies, the pooled estimate for remission ranging from 76.7% to 87.7% indicates precision in the results, as both ends of the confidence interval would lead to the same clinical decision of restarting patients after a drug holiday or relapse.

CONCLUSION(S): Our results indicated that restarting anti TNF after a drug holiday or due to disease relapse may lead to clinical response and can be considered in clinical practice.

PO30

A Rare Case of Crohn’s Disease and Hemophilia Presenting With Acute Massive Gastrointestinal Bleeding

Hamad Ahmad1, Amina Hamad1, Karais Lambeer1, Edam Ali2.

1East Carolina University, Greenville, NC; 2UT Southwestern, Dallas, TX.

INTRODUCTION: Coexistence of Inflammatory bowel disease (IBD) and Hemophilia is rare. IBD is a chronic inflammatory condition that is known to be associated with a hypercoagulable state, which makes it prone to more frequent episodes of bleeding. Acute massive gastrointestinal bleeding (GIB) is a rare complication of Crohn’s disease (CD). This case report presents an unusual initial presentation of Crohn’s disease with massive GIB in a patient with hemophilia.

CASE PRESENTATION: A 19 year old Caucasian male with history of mild Hemophilia A pre- presented with a 1 week history of painless hematochezia. He denied any abdominal pain, rectal pain, nausea, vomiting, and diarrhea. He denied tobacco, alcohol, and recent NSAID use. On physical examination, patient was tachycardic, had mild abdominal tenderness, and hematochezia on rectal exam. Laboratory finding was significant for an acute drop in hemoglobin from 10.7 g/dL to 6.7 g/dL. Given history of hemophilia, factor VIII level was checked and was at 44 % (normal range of 55%–145%). Patient was resuscitated with fluids and blood products and given factor VIII replacement. Esophagogastroduodenoscopy was unremarkable. Given his young age and painless hematochezia, meckel’s scan was performed and was unremarkable. Subsequently, patient underwent a colonoscopy which surprisingly revealed an inflamed, erythematous, and ulcerated ileocecal valve. The endoscopic findings along with the pathological findings were consistent with CD. Laboratory markers, including erythrocyte sedimentation rate and C-reactive protein were elevated. Patient was started on prednisone and was scheduled a close hospital follow-up with gastroenterology clinic.

CONCLUSION: IBD is rarely associated with inherited bleeding disorders like hemophilia. In this subset of patients, CD may present with an acute painless GIB. IBD is associated with a hypercoagulable state. However, it can still occur in patients with a bleeding disorder.

PO29

Patient Perception and Clinical Impact of Direct-to-Consumer Advertising in Inflammatory Bowel Disease

Phillip Gu1, Edward Yang2, Pumma Chittajaula1, Cathy McNellis1, Amit Singal1, John Kwon1, Tannem Akhond1.

1UT Southwestern, Dallas, TX; 2UC San Diego, San Diego, CA.

BACKGROUND: Direct-to-consumer drug advertising is a controversial marketing strategy that can potentially empower patients and/or negatively impact clinical practice and the patient-provider relationship. With an increasing number of available therapies for inflammatory bowel disease (IBD), little is known about patients’ attitudes regarding IBD-related direct-to-consumer advertising (IBD-DTCA) and its impact on treatment decisions in clinical practice. We aim to characterize patient knowledge amongst inflammatory bowel disease (IBD) patients.

METHODS: We administered a 58-item, mailed questionnaire to patients receiving Gastroenterology subspecialty care at a large academic health system. The survey assessed patient awareness and perception of IBD-DTCA and its effect on IBD treatment decisions and discussions. We conducted a binary random effects meta-analysis to evaluate patient-level factors associated with awareness and favorable perception of IBD-DTCA.

RESULTS: We achieved a response rate of 15.2% (n = 226 of 1486). Most patients (93.3%) reported awareness of IBD-DTCA, with adalimumab receiving the most exposure. A majority of respondents reported IBD-DTCA made them more aware of treatments than they otherwise would not know about (33.6%), provided information in a balanced manner (63.5%), and taught them about new potential risks and side effects (64.5%). Patients without a college degree and those with a household income less than $75k per year perceived IBD-DTCA significantly more favorably. A majority of aware respondents reported IBD-DTCA made them less confident in their provider’s judgement (12.3%) and that a treatment option was being withheld (6.6%). Finally, IBD-DTCA rarely changed IBD management, with only 7.6% of respondents having a discussion with their provider about the advertised drug and only two respondents (0.9%) being initiated on the advertised drug.

CONCLUSION(S): IBD patients were aware of IBD-DTCA and perceived it favorably, however, IBD-DTCA rarely led to patient-provider discussions or changes in treatment regimen.

PO32

Does Patient Knowledge Affect Anxiety, Depression, and Quality of Life in Patients With Inflammatory Bowel Disease?

Muhammad Hanni1, Aya Hamade2, Habib ElKhoushy1, Iad Kfouri2, Mohamad Chahrou2, Joanna Kahlhifi1, Serena Saadeh2, Nadim Kattouf2, Alaa Sharara1, Fadi Francis1, Fadi Mourad1, Assaad Sewodi1, Fady Daniel1, David Benton1, Iima Hashish1.

1American University of Beirut Medical Center, Beirut, Lebanon; 2University of Pittsburgh, Pittsburgh, PA.

BACKGROUND: Disease specific knowledge amongst inflammatory bowel disease (IBD) patients remains lacking. Our study aims to (1) determine the extent of disease specific knowledge amongst