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Romanian Society of Gastroenterology and Hepatology (SRGH)

The 11th National Symposium on Inflammatory Bowel Diseases

*Bucharest, Romania
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Abstract Book

1 THE LINK BETWEEN THE PSYCHOLOGICAL FACTOR AND THE RELAPSE OF ULCERATIVE COLITIS

Carmen Anton^{1,2}, Mihaela Dimache^{1,2}, Alina Harja², Oana Malinoiu², Roxana Eleonora Onofrei², Oana Barboi^{1,2}, V. Drug^{1,2}

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Introduction: Ulcerative colitis (UC) is associated with psychological disorders, mostly in active periods of the disease, or in relapsers.

Patients and methods: The study included 36 patients (19 males and 17 females), mean age 41 years with moderate forms of UC, hospitalized in Gastroenterology Institute, which were clinically, biologically and by colonoscopy with biopsy evaluated, in which psychological profile was also made.

Results: Most of the patients (61.5%) were emotionally unbalanced with anxiety and the others had depressive disorder, in active forms, or flares of UC. Under combined anxiolytic/antidepressant treatment and reconsidered antiinflammatory therapeutic doses, the course of the UC was stabilized, with a favourable evolution, through monitoring.

Discussions: Rates of depression are higher among patients with UC, as compared to other diseases and the general population. Anxiety is also common in IBD patients. Medication management may be necessary in addition to therapy with a trained professional. The gastroenterologist may prescribe an antidepressant to help stabilize the patient's mood, or may also suggest a consultation with a psychiatrist.

Conclusion: Patients with active forms of UC and relapsers as well, usually have manifest psychological disorders, that is why monitoring is necessary for associated IBD multimodal therapy with antidepressants in prevention of disease relapses and to improve the quality of life.

Key words : Ulcerative colitis, psychological disorders, treatment

2 ENDOSCOPIC MUCOSAL HEALING AS THERAPEUTIC TARGET WITH BIOLOGICS IN CROHN'S DISEASE

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Introduction: The management in Crohn's disease (CD) is medical and surgical, but treatment patterns have changed radically over the past years, with an increase in the use of immunomodulatory drugs and introduction of biologic therapy.

Patient and method: the clinical case includes a 31 years male known with CD severe form with left sided colitis and distal ileum, also right colon localization, treated initially with 5-ASA and corticosteroids, without clinical remission (persistent diarrhea, abdominal pain) and occurrence of side effects (abdominal and trunk red stretch marks). The patient was treated then with azathioprine (AZA) 2,5mg/bw/day 10 months with clinical improvement, but no endoscopic remission. The mucosal healing was obtained by induced treatment with Infliximab (IFX) 5 mg/bw/day with clinical and colonoscopic monitoring after 6 months of therapy.

Results: Clinical remission (CDAI <150) and mucosal healing (absence of ulcerations) with IFX were obtained in 6 months, the required time being significantly less than for AZA treatment, without relapses.

Discussions: Mucosal healing represents the final target in

inflammatory bowel disease and anti-TNF agents administration induces faster the therapeutic expectation. To evaluate the impact of biologics on the maintenance of endoscopic remission is useful in patients with CD who did not respond to previous treatment.

Conclusion: The treatment with biologics in CD is highly effective in patient who does not respond/tolerates other treatment (antiinflammatory or immunomodulatory) because the mucosal healing and remission maintenance are associated with a better prognostic disease, with less complications, hospitalizations and the improvement of life quality.

Key words : Crohn disease, mucosal healing, biologics

3 FIRST CASE OF STEROID-REFRACTORY SEVERE ULCERATIVE COLITIS TREATED WITH BIOSIMILAR AGENT IN ROMANIA- CASE REPORT

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Introduction: Biologic therapy have significantly improved the management of patients with severe ulcerative colitis after failed response to conventional steroid or immunosuppressive therapy. The introduction of biosimilars agents have been recently approved in management of inflammatory bowel disease since they are considered to be equivalent to the reference biologic.

Case Presentation: A 57-year-old woman, was admitted in Mureș County Clinical Hospital, Department of Gastroenterology, with diffuse abdominal pain, diarrhea (> 10 stools/day), rectal bleeding and weight loss (10 kg in 3 months). She has a past medical history of palmoplantar keratoderma, chronic venous insufficiency and depression. Rectosigmoidoscopy and biopsy were performed, resulting in a diagnosis of moderate/severe ulcerative colitis. She was treated with Mesalazine and corticotherapy (Prednisolone) tapered by 5 mg weekly. After a few months, she developed new bloody diarrhea with nausea, vomiting and abdominal pain. Azathioprine 2.5 mg/kg/day was added the following months, with no clinical or endoscopic improvement. New treatment with Adalimumab (Hyrimoz) 160 mg dose of induction, followed by 40 mg every 2 weeks, successfully control her symptoms and normalize her inflammatory markers. The patient will be reevaluated endoscopically after 2 months of treatment.

Result: The significance of this case is to show the effectiveness and safety of biosimilars in patients with inflammatory bowel disease.

Conclusion: Concerning the increasing drug armamentarium, real-world data are needed to improve our knowledge regarding the efficiency and safety of biosimilars, since they may lead to major healthcare cost savings. Decisions based in choosing the right treatment for the right patient, remain the next challenge.

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4 SURGICAL TREATMENT OF ABDOMINAL ABSCESES IN THE COMPLEX TYPE OF FISTULIZING CROHN'S DISEASE. THE IMPORTANCE OF A MULTIDISCIPLINARY APPROACH TO AVOID STOMA AND REDUCE POSTOPERATIVE COMPLICATIONS.

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In the severe cases of penetrating Crohn's disease with secondary abdominal abscess, the challenges facing surgical treatment are multiple. An emergency surgery performed in a malnourished patient with abdominal sepsis after prolonged high doses corticosteroid and biologic treatment is associated with a high rate of postoperative complications and would very probably require a temporary stoma. Our therapeutic strategy is multidisciplinary. Abdominal abscesses are drained percutaneously under ultrasound or CT guidance, an aggressive enteral feeding treatment is started preoperatively, the corticosteroid doses are reduced, the biologic therapy is stopped 4 weeks before surgery and patients are offered psychological support. Surgery is performed 3-4 weeks after drainage of the abscess with the aim to remove the diseased segment followed by primary digestive anastomosis and treatment of the transmural fistulae tracts that usually accompany this disease. In the present communication we present our experience and review the data in the literature on the multidisciplinary treatment of these complex cases.

5 CORRELATION BETWEEN HISTOLOGICAL ACTIVITY AND ENDOSCOPY IN PATIENTS WITH UC IN A TERTIARY CENTER FROM ROMANIA

M.Cojocaru, C. Gheorghe, L. Gheorghe, G.Becheanu

Background: Histological activity is important in the choice of managing a patient and all of them that present with residual microscopic acute inflammation are more likely to relapse at a certain moment. The aim of the study was to see if we can find any correlations between the macroscopic aspect of the intestine and the degree of histological activity in patients with such disease.

Methods: The medical charts of a total 84 patients were reviewed with a median age of 39.8 years old (18–78 years); 55 of them were males and 29 were females, most of them from the urban area and were non-smokers; 154 biopsies were analysed by a histopathologist with experience in IBD. Colonoscopies with biopsies were performed once in 65 patients, twice in 11 patients, three times in 4 patients, and four times in 3 patients. Total number of endoscopies performed are 102. To make a difference between histologically active or inactive disease, we considered a Geboes score >3.1 and regarding endoscopy, the optimal cut-off Mayo endoscopic subscore to be a score of 1. Extent of disease: E1–28 (22%); E2–33 (40%); E3–31 (38%).

Results: In 61% of all endoscopies, the mucosa was inflamed, but anyway 15% did not show an important histological inflammation (Geboes score <3.1). Endoscopic remission was observed in the other 35.4% of procedures; however, in biopsies, 22% exhibited histological inflammation.

Conclusions: Our results indicate that histological activity was correlated with endoscopic activity in patients with UC. Focal active inflammation is likely to be missed by endoscopy and biopsies thus add an additional dimension regarding the presence of inflammation. Therefore, it seems appropriate to use both endoscopy and histology for the assessment of disease activity and extent.

6 A RARE CASE OF CROHN'S DISEASE EXACERBATION ASSOCIATED WITH CYTOMEGALOVIRUS AND CLOSTRIDIUM DIFFICILE INFECTIONS: A CASE REPORT

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Instruction: Cytomegalovirus infection (CMV) is rare in inflammatory bowel disease (IBD) and is more often observed in refractory ulcerative colitis (UC). Clostridium difficile infection (CDI) is another risk factor for exacerbation of underlying IBD. Literature is scarce regarding association of Crohn's disease (CD) with CMV. These three diseases (CMV, CDI, CD) were extremely rarely reported together.

Case report: A 49-year-old male known with left UC since 1998 in remission with oral aminosalicylates, axial spondyloarthritis (metallic hip arthroplasty), coronaroplasty and recently treated Clostridium difficile infection (CDI), was admitted with 7 watery stools/day, abdominal pain, rectal bleeding and weight loss. Physical examination revealed hypotension, tachycardia, cachexy, pallor and abdominal tenderness in the lower quadrants. Relevant laboratory tests were: severe anemia, severe hypoalbuminemia, elevated non-specific inflammatory biomarkers, fecal calprotectin=1385 µg/g, positive CDI toxins, positive CMV-IgM antibodies. MRI-enterography (low quality examination due to hip arthroplasty) could only reveal inflammation in the rectum and left colon. Colonoscopy showed lesions suggestive of severe active colonic CD with perianal fissures and patches of pseudomembranes. Biopsies performed confirmed the diagnosis of an active CD. Therapy with blood transfusions, i.v. corticosteroids, Metronidazole, Vancomycin and Ganciclovir was initiated. Due to the severity of symptoms, concomitant therapy with Adalimumab (ADA) was started with suboptimal response after initiation. Therapeutic drug monitoring was performed: ADA trough levels were 5,5 mcg/ml and antibodies against ADA were negative. Optimization of therapy with 40 mg weekly was preferred and clinical remission was achieved.

Conclusion: The concurrent presence of CMV and CDI is challenging in the management of patients with IBD. Another particularity of the case is the extremely rare presence of CMV infection in CD.

7 PREOPERATIVE PREDICTORS OF POSTOPERATIVE COMPLICATIONS IN ULCERATIVE COLITIS PATIENTS UNDERGOING SURGERY

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Introduction: Surgical intervention is often necessary in patients with UC, approximately 10% of them requiring a colectomy within 10 years of diagnosis. Previous studies indicate that postoperative complications occur in about 30% of cases.

Patients and Methods: We performed a retrospective study using hospital databases including all adult UC patients admitted in our Tertiary Gastroenterology Center during January 2012 – March 2019 who underwent colectomy. There were 26 patients included (out of 592 UC cases – 4.7 %; 2 were excluded due to lack of information). Fisher exact test was used to assess the correlation between age, smoking status, disease severity and extension, preoperative treatment and intervention type on postoperative complications.

Results: The most frequent postoperative complications were the

local and systemic infections: abscesses (3.85%), wound infections (11.54%), sepsis (7.69%) and pneumonia (7.69%). Pouch-related complications (pouchitis, stenosis, pouch failure and irritable pouch syndrome) were the most common long-term complications (41.67%). Predictors for the pouch-related complications were urgent surgery ($p = 0.004$), and the young age of the patient (≤ 30 years) – $p = 0.007$. Urgent colectomies are a risk factor for more frequent infections ($p = 0.02$), as well. No significant correlation with postoperative complications were found for the smoking status, severity of the disease, type of treatment and anemia. Furthermore, we analysed the time interval from the diagnosis until the surgical intervention, a maximum interval of 216 months with a mean period of 36 months was registered; a shorter time to surgery was found in patients who received preoperative biological treatment, as a marker of disease severity ($p = 0.02$).

Conclusions: Although in our UC patients series surgery was less frequently required, the postoperative complications are not to be neglected, especially in the case of emergency surgeries and in young patients with severe disease.

8 LOW SENSITIVITY OF INFLAMMATORY UNSPECIFIC MARKERS IN RELATION WITH THE ENDOSCOPIC EVOLUTION OF A CROHN'S DISEASE PATIENT: CLINICAL PRESENTATION

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Introduction: Among the biological tests used in order to monitor an inflammatory bowel disease (IBD), we evaluate the inflammatory unspecific markers (erythrocyte sedimentation rate- ESR, C reactive protein- CRP and white blood cells count- WBC), together with fecal calprotectin (FC).

Patients and method: We present a case of colonic Crohn's disease, treated with biological agent adalimumab from June 2017 till now. We followed the clinical, biological and endoscopic evolution of this 52-years old male patient, for the period with biological therapy, to notice which of the biological tests are better correlated with the endoscopic lesions.

Results: Our patient was evaluated at the initiation of the biological treatment and every six months from clinical, biological and colonoscopic point of view. The biological tests included ESR (38/h at the initiation and normal 6 months later), WBC count (normal from the beginning), CRP (3,54 mg/dl at the initiation and normal at one year of biological therapy) and FC- 3000 mg/kg at the beginning and normal at 1 year and a half of biological therapy. The colonoscopic lesions were very severe at the initiation and the colonic aspect is normal now.

Discussions: ESR and WBC count proved a very low sensitivity, being normal from the beginning or becoming normal at six months of biologic therapy (when the endoscopic lesions were still important and FC was 407 mg/kg). Only CRP showed a better correlation with the colonoscopy and FC.

Conclusions: Among the inflammatory unspecific markers, only CRP showed a certain sensitivity in the process of monitoring our IBD case.

9 DEMOGRAPHIC FACTORS IN ULCERATIVE COLITIS?

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Background: Ulcerative colitis (UC) is a chronic, idiopathic disease. Although multiple pathophysiological mechanisms have been described, a "trigger" factor could not be determined with certainty. Aim: Highlighting the impact of environmental factors on phenotype and severity.

Methods: We performed a prospective study lasting three years, January 2016 - December 2018. The study included patients with UC diagnosed and monitored in Center of Gastroenterology and Hepatology, "St. Spiridon" Hospital Iasi. All patients were evaluated by colonoscopy to assess the extension of the lesions and biopsies were taken for histological confirmation. UC activity was quantified by Truelove-Witts score.

Results: One hundred and five patients were studied. Demographic analysis showed: a predominant male gender (51%), the average age of diagnosis was 42 years, with a bimodal distribution (first peak 18-35 years and another between 55-65 years) without significant differences from the urban than in rural areas. 13.7% had a first degree relative with inflammatory bowel disease (IBD), 31.8% were non-smokers and 24.5% former smokers. To 12.4% of patients the lesions were limited to the rectum, 28.5% had proctosigmoiditis, 30.7% as left colitis and 10.2% lesions were extended to the entire colon. Disease activity was significantly correlated only with the extension of lesions. Gender, age, smoking status / non-smoking, family history of IBD did not influence the activity and extension lesions.

Conclusions: The study showed bimodal distribution of age of diagnosis. Environmental factors had no significant influence on the activity or extension of lesions.

10 ANEMIA IN PATIENTS WITH INFLAMMATORY BOWEL DISEASE

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Background: Anaemia is the most frequent extradigestive manifestation in patients with Inflammatory Bowel Disease (IBD). Up to 74% patients develop anemia during life time.

Aim: To evaluate the prevalence and the risk factors for anaemia in patients with IBD hospitalized during two years.

Methods: We conducted a prospective study between 1st January 2017-31st December 2018 which enrolled 187 patients with ulcerative colitis (UC) and 85 patients with Crohn's disease (CD). A complete clinical and biological exam was performed to each patient. The diagnosis was established by colonoscopy and biopsy. The localization of lesion and the behavior of the disease was classified according to Montreal classification. The activity of the disease of the disease was established by using UCDAI (ulcerative colitis disease index) for UC and CDAI (Crohn disease activity index) for CD. We define anaemia according to OMS definition: $< 13\text{g/dl}$ for men, $< 12\text{g/dl}$ for women. Results: The prevalence of anaemia was 32.08% in UC and 36.4% in CD. The most frequent form of anemia was iron-deficiency anaemia (79.66% of patients with UC and 80.64% of patients with CD). Factors associated with anaemia were similar for those with CD and UC and included extended forms of the disease, more severe forms of the disease, a longer period from diagnosis and smoking.

Conclusions: The prevalence of the anemia is still important, one third of the patients with IBD developed anemia. The most frequent form of anemia was iron-deficiency anemia. Incorporation of screening for anemia and, in particular, iron deficiency, should be a component of monitoring and treatment of these patients.

11 FULMINANT COLITIS: THE SURGEON'S OPINION

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Abstract

Severe ulcerative colitis is a form of ulcerative colitis associated with bloody diarrhea ≥ 6 stools / day and any signs of systemic toxicity. A subset of patients with severe colitis may progress to fulminant colitis, a clinical situation associated with diarrhea more than 10 stools / day, continuous bleeding, abdominal painful distension and acute toxic symptoms. In these particular cases, there is a high risk for toxic megacolon and bowel perforation. The management of such patients should be prompt and should be made in a multidisciplinary team, including the surgeon's opinion in an early setting. Colectomy in some patients with fulminant colitis is mandatory. Indications for emergency surgery are: bowel perforation, life-threatening hemorrhage, toxic megacolon and in cases of lack of favorable response to correct medical treatment. The timing of surgery in these patients is of utmost importance for a favorable outcome because the delay in surgery is associated with increased mortality rates. Usually, a total colectomy with end ileostomy is preferred in an emergency setting. In conclusion, the management of patients with fulminant colitis should be made in a multidisciplinary team, including the surgeon's opinion in an early setting because the delay in performing colectomy is associated with increased mortality rates.

12 "FILLING THE GAP": THE MEDICAL TREATMENT OF FISTULAS IN CROHN'S DISEASE

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Fistulas are among the most common and debilitating complications of Crohn's disease, impacting the quality of life, the morbidity rate, as well as decreasing the work productivity. Uncontrolled, long-standing, transmural inflammation may lead to fistula formation and persistence. Antibiotics and immunosuppressants are used to control the infection and the inflammation of the intestinal wall, in order to close the fistulous tract and to prevent the recurrence. However this approach has limited efficacy, with 50% of fistulas failing to close or relapsing, even after surgery. Local injected treatments aiming to close the fistulas are already in use: anti-TNF's drugs or a mixture of fibrinogen, factor XIII, plasminogen, aprotinin and thrombin, but the data are scarce. The newest available treatment relies on local injection of autologous adipose-derived stem cells, whose immunoregulatory and anti-inflammatory properties are meant to enhance regeneration and to repair the damaged tissues. The results of the first phase III, randomized controlled trial, were encouraging, with 1 year fistula healing rates of 57% compared to 37% for patients treated with fibrin glue injections. Even better, until now, there is no evidence of serious adverse events secondary to stem-cell therapy. Future research is focusing on delivering the stem cells impregnated on a matrix, in order to improve the healing rate by prolonging the local presence of stem cells.

Managing fistulas in Crohn's disease is a challenging process that requires a collaborative multidisciplinary approach in the patients' best interest.

13 VITAMIN AND MINERAL DEFICIENCY IN INFLAMMATORY BOWEL DISEASE

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Introduction: Inflammatory bowel disease represents inflammatory chronic affection of the digestive tract and includes two distinct pathologies: Crohn's disease (CD) and ulcerative colitis (UC). Because it does not affect only the digestive system, many patients develop extradigestive symptomatology, so it should be considered a systemic disease, which also includes nutrients deficiency

Methods: This retrospective, observational study was conducted over a period of three years in The Institute of Gastroenterology and Hepatology Iasi and included a group of 80 patients. It showed that nutrients deficiency is sometimes related with the inflammatory intestinal activity but most of the times there is no link between the two entities. Each patient was evaluated clinically, biologic, endoscopic and histologic.

Results: The prevalence of UC was of 72,3%, much higher than CD (27,7%). More than half of the patients were men (56,3%). 47,3% of the CD patients presented vitamin and minerals deficiencies, vitamin B12 deficiency being the most common one (22%), followed by the folic acid deficiency (12,3%). Both conditions were associated with active gut inflammation, distal ileum affection, more frequent in women and were improved after medical treatment.

33,8% of the UC subjects showed vitamin and mineral deficiency, especially iron deficiency (47,8%). They received not only dietary interventions but also oral iron supplements. Calcium, vitamin D, zinc and magnesium deficiency were found only in few subjects and we could not establish a link with the activity of inflammatory bowel disease.

Conclusions: Vitamin and mineral deficiency often have negative outcomes regarding the quality of life, sometimes even more than the inflammatory disease. Diagnosis and correct treatment are mandatory in the evolution and prognosis of inflammatory bowel disease subjects, one of the main targets being improving quality of life.

14 QUALITY OF LIFE AND IRON REPLACEMENT IN INFLAMMATORY BOWEL DISEASE

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INTRODUCTION: Anemia is one of the most frequent systemic complications of inflammatory bowel diseases (IBD). Often, anemia is underestimated and under-assessed in IBD patients' management. Unrecognised and not treated correspondingly, anemia is likely to have a negative impact on both IBD evolution and quality of life (QoL). The aim of the study was to compare the impact of oral iron replacement on QoL in IBD patients with anemia, or in those with hypoferritinemia alone.

METHODS: We conducted a prospective study for 6 weeks, that included 29 IBD patients diagnosed with anemia or hypoferritinemia. All patients were treated with oral iron preparations until the iron deficiency was corrected. QoL was assessed by inflammatory bowel disease questionnaire -32 (IBDQ-32) at enrollment in the study and after 6 weeks post treatment.

RESULTS: Twelve patients with anemia and 17 with hypoferritinemia were treated with oral iron preparations. Twenty three patients (79,3 %) have presented a significant improvement of median IBDQ-32 score ($p=0.04$). When comparing anemic with hypoferritinemic patients, there was a substantial improvement of IBDQ-32 median score in hypoferritinemic vs. anemic patients (16 vs. 7, $p = 0.02$).

CONCLUSIONS: According to our data, iron replacement have improvement QoL in both hypoferritinemic and anemic IBD patients. In conclusion, hypoferritinemic IBD patients should undergo iron substitution treatment, even in the absence of anemia.

15 LATENT TUBERCULOSIS INFECTION IN IBD PATIENTS RECEIVING TREATMENT WITH ANTI TNF-ALFA AGENTS

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Background: Newly acquired or reactivated latent tuberculosis is a major impediment in initiating or maintaining treatment with anti TNF alfa agents in IBD patients. The aim of this study was to evaluate the effectiveness of the prophylactic treatment and the rate of reactivation of latent tuberculosis infection (LTBI) in these patients in an endemic region for TB.

Methods: We retrospectively reviewed all IBD patients who were in treatment with Anti TNF alfa between Dec 2017-Dec 2018. The anti TNF alfa agents available at the time of the study were Infliximab (IFX) and Adalimumab (ADA). Basic epidemiological data, rate and type of adverse events, frequency of LTBI, rate and time to reactivation and time to AntiTNF alfa reinitiation were noted. LTBI was diagnosed based on Interferon Gamma Release Assay (IGRA) and chest X-ray.

Results: A total number of 116 patients were included: 82 (70.68 %) with Crohn's Disease (CD) and 34 (29.31%) with Ulcerative Colitis (UC). Mean age at diagnosis was 32.31 years (+/- SD 12.905 y) with a slight male predominance (52.58%). Ileocolonic location (48.78 %) and inflammatory pattern (45.12%) was predominant in patients with CD, as pancolitis was predominant in patients with UC (58.82 %). IFX was the anti TNF of choice in 69 patients (59.48 %), and ADA in 47 patients (40.51%).

Adverse events occurred in 18 patients on anti TNF alfa (15.5 %). The most frequently encountered were allergic reactions (50%), followed by infections, including newly acquired tuberculosis (27.7%)

21 patients (18.1 %) were diagnosed with LTBI. All received prophylactic treatment with Isoniazid 1 month prior to anti TNF start dose, that continued to a total time of 9 months. The dose and duration of treatment were established according to the recommendation of a pneumologist.

Reactivation of LTBI occurred in 4 patients (19.04 %) previously diagnosed and treated completely (1 patient with ADA).

The mean time to reactivation was 10.2 months for IFX and 12.1 months for ADA. Anti TNF was stopped and treatment for active TB was initiated in all patients. Anti TNF was reinitiated in 80% of cases, after a median time of 8.5 months.

Conclusion: Rate of LTBI is higher in endemic countries but reactivation of the disease can be efficiently reduced with a correctly made diagnosis and prophylactic treatment, leading to rates of reactivation that are only slightly higher than the ones reported in non endemic regions.

16 ANXIETY AND DEPRESSION- UNDERMINED COMORBIDITIES AMONG IBD PATIENTS?

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Introduction: Among endogenous factors involved in the pathophysiology of inflammatory bowel disease (IBD), psychological distress appears to be one pillar in influencing IBD patients' reported outcome. The aim of this prospective study was to evaluate the presence of psychological distress among IBD patients and to identify potential correlations between disease activity and psychological distress.

Material and methods: 58 adult IBD patients consecutively admitted in the Gastroenterology Department and 32 healthy adults consecutively addressed for colonoscopic screening in the outpatient department have been included in the study. The presence of psychological symptoms was evaluated in both groups using Hospital Anxiety and Depression Scale (HADS), with scores of 8 or higher considered abnormal. Anamnestic and clinical data, biochemical parameters have also been evaluated in the IBD group.

Results: Among the IBD group, 58.62% of patients registered high HADS for anxiety, and 44.82% for depression based on HADS score, although only 25.86% had active disease based on CDAI and Mayo Scores. Among IBD patients during flare, high HADS scores correlated with clinical disease activity ($r=0.43, p<0.05$), but not with biological parameters reflecting inflammatory syndrome ($r=0.19, p<0.05$). There was a significant difference in HADS scores, both for anxiety and depression between IBD group- both remission and flare- and healthy controls ($p<0.05$).

Conclusion: Psychological distress is frequent among IBD patients, both during disease flare and remission, it is often underreported, even though it highly impairs patients' quality of life. Early intervention targeting psychological comorbidities in IBD patients should be included in the standard of care.

Key words: inflammatory bowel disease, HADS, anxiety, depression

17 EFFICACY AND SAFETY OF LOW-MOLECULAR WEIGHT HEPARIN FOR THE PREVENTION OF VENOUS THROMBOEMBOLISM IN PATIENTS WITH SEVERE ULCERATIVE COLITIS

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Background: Active ulcerative colitis (UC) is associated with an increased risk of venous thrombosis that occurs prevalently as deep vein thrombosis and pulmonary embolism. The prevention of venous thromboembolic events (VTE) in UC patients includes the use of low-molecular weight heparin (LMWH), particularly in hospitalized patients with severe disease. However, data on the safety and efficacy of LMWH for the prevention of VTE in patients with UC are limited, so we decided to perform a prospective open study to address these objectives.

Methods: All consecutive patients with severe UC admitted to the Institute of Gastroenterology and Hepatology from January 2010 to December 2015 were included in this study. Enoxaparin (ENX), at

a dose of 100IU per Kg subcutaneously once a day, was added to standard therapy for all the time period considered at risk for VTE. In case of clinical suspicion or laboratory findings suggestive of VTE the diagnostic tests required for the diagnosis of VTE were performed. The occurrence of new cases of VTE and side effects attributable to ENX, in particular an increase of rectal bleeding, was recorded. The obtained data were compared with those of a historical cohort of hospitalized UC patients with severe disease but not treated with ENX.

Results: Thirty patients were enrolled in the study, 15 in the group treated with ENX (group A) and 15 in the control group (group B). The average duration of treatment with ENX was 14±7 days. No patient in group A presented VTE during treatment, while four patients in group B developed thrombosis (p=0.04). In group A two patients presented an increase of rectal bleeding compared to three patients in the control group (p=0.5).

Conclusions: The results of the present study show that in a population of hospitalized UC patients with severe disease the use of ENX for the prevention of VTE is effective and safe. However, further studies on larger populations of patients are needed to confirm these findings.

18 THE RISK OF THROMBOEMBOLIC EVENTS IN PATIENTS WITH INFLAMMATORY BOWEL DISEASE

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Background: Inflammatory bowel disease is an independent risk factor for thromboembolic events. The aim of this study was to evaluate the prevalence and possible risk factors associated with the occurrence of thromboembolic events in patients at our clinic with inflammatory bowel disease.

Methods: All patients with inflammatory bowel disease that had experienced any type of thromboembolic event were retrospectively assessed by a specialized unit in an independent, third-party hospital.

Results: Data were collected retroactively for dates between January 2010 and December 2015, resulting in a total of 163 patients. 61% of these were diagnosed with ulcerative colitis (UC) and 39% with Crohn's disease (CD), as per standard diagnostic criteria. 65% of the patients were male, with an average age of 46 years for the UC group (range: 35–68) and 51 years (range: 25–74) for the CD group. Of the CD patients, 58% had B1 disease behavior, 25% had B2 and 17% had B3. Disease location was: L1: 17%, L2: 33%, L3: 50%. Of the UC patients, classifications were: E3: 78%, E2: 11%, E1: 11%; S0: 22%, S1: 22%, S2: 11%, S3: 44%. At the time of occurrence of the thromboembolic event, 48% had mild to moderate activity and 22% had severe activity. In our cases, the most common thromboembolic event was deep vein thrombosis (30%), followed by pulmonary thromboembolism (14%). Only one death occurred due to thromboembolism, involving a patient with ulcerative pancolitis patient with mild to moderate activity being treated by corticosteroids. When the events occurred, 52.3% of the patients were being treated with corticosteroids, 30.4% were receiving immunosuppressive therapy and 17.3% were receiving anti TNF therapy.

Conclusions: Inflammatory bowel disease is a risk factor for the occurrence of thromboembolic events. In our series of cases, the patients at greatest risk were males, those with CD and those with active-phase disease. No other associated risk factors were found.

19 CROHN DISEASE COMPLICATIONS: WHEN WE SHOULD DRAIN THE ABSCESES?

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Approximately 70-90% of patients with Crohn's disease require surgical procedures during their lifetime. About 1/3 of patients may need more than two bowel resections.

The percutaneous abscess drainage can play an important role in the management of these patients, by minimizing the number of surgical procedures. Abdominal or pelvic abscess can occur in up to 30% of patients with Crohn's disease.

The traditional surgical treatment of abscesses has been replaced with percutaneous procedure, supported by high-resolution radiological techniques such as computed tomography and ultrasound.

The paper will present the management of Crohn's disease complications that can be addressed by interventional radiologist. Percutaneous abscess drainage done by the interventional radiologist using CT and US guidance in Crohn's disease has a high technical success rate of up to 96% and may avoid surgery in short-term management of the patients.

Key-words: CT, US, Chron disease, percutaneous abscess drainage

20 ANEMIA AND IRON DEFICIENCY IN INFLAMMATORY BOWEL DISEASE

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Keywords: inflammatory bowel disease, iron deficiency anemia

Background: Anemia is a complication commonly found in inflammatory bowel disease (IBD) with a great impact on the patients quality of life. The diagnosis and therapy of anemia has become one of the most challenging fields in the clinical IBD practice. The frequent cause of anemia is iron deficiency. Less common causes of anemia include deficiency of vitamin B12 and folic acid.

Materials and methods: We conducted a retrospective, observational study over a period of two years, including 65 patients hospitalized in a tertiary center in North-Eastern Romania between January 1, 2017 through December 31, 2018. Each patient was evaluated clinical, endoscopic, histopathological and were performed blood tests. We define anemia according with WHO criteria, hemoglobin level < 13 g/dl in male and < 12 g/dl in female. We analyzed the prevalence and main causes of anemia in patients with IBD in our geographical area.

Results: Ulcerative colitis (43- 66.15%) is more frequent compared to Crohn's disease (22- 33.84%) in our study and males are mostly affected. The incidence of anemia was found to 25 (38.46%) patients. Anemia was frequently in patients with Crohn's disease (17- 68.18%) versus patients with ulcerative colitis (20- 46.51%) and was associated with hospital admission. Iron deficiency anemia was present in 17 (68%) of cases, lower values 5 (20%) has vitamin B12 deficiency and 3 (12%) folic acid.

Conclusion: Anemia is an important extraintestinal manifestation that often is overlooked and decrease quality of life in IBD

patients more than the disease itself. Therefore, special attention is needed to improve the quality of care, adequate treatment and proper follow-up to avoid consequences of iron deficiency anemia. Adequate treatment has a major impact on the patient and implicitly on society. To decrease the occurrence of anemia in patients, further studies are required to establish accurate treatment.

21 THE FREQUENCY OF INFLAMMATORY BOWEL DISEASE AS CAUSE OF RECTORAGIA- A SINGLE CENTER EXPERIENCE

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Keywords: lower gastrointestinal bleeding, inflammatory bowel disease

Backgrounds: Rectoragia represents a challenge in daily practice which impose investigation to determine the cause, colonoscopy being the most accurate one. The aim of our study was to evaluate the pathologies diagnosed at colonoscopy in patients with rectoragia.

Methods: We conducted a retrospective study, including patients hospitalized for rectoragia in a tertiary center between January 2017 through December 2018. We evaluated the differences between age groups and the frequency of inflammatory bowel disease in these patients.

Results: From the 1850 colonoscopies performed (67.56% in men and 48% in women), 27.9% were in patients under 50 years old and 72.1% in patients over 50 years old. 67.5% were total colonoscopies, the cause of an incomplete colonoscopy being: stenosing cancer, red blood in high volume and other stenosis. The pathological findings were: colonic polyps in 24.5% of cases; hemorrhoidal disease in 20.1% of cases; colorectal carcinoma in 19.3% of cases; multiple diverticula in 11.3% of cases; IBD in 8.6% of cases; telangiectasia in 1% of cases; ischemic colitis in 0.5% of cases, radiation proctitis in 0.5% of cases; while in 14.2% of cases the bleeding source couldn't be found. In patients over 50 years old, we found colorectal cancer and polyps in 54% of cases and IBD in 7% of cases while in patients under 50 years old, colorectal carcinoma and polyps were diagnosed in 17.4% of cases and IBD in 12.8% in patients with rectoragia.

Conclusion: In our study group we found inflammatory bowel disease in 8.6% of cases with rectoragia, data similar to those in literature.

22 THERAPY EXPERIENCES AMONG PATIENTS WITH INFLAMMATORY BOWEL DISEASE-RELATED IRON DEFICIENCY ANEMIA - A REAL LIFE STUDY

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Keywords: inflammatory bowel disease, iron deficiency anemia

Background: The leading cause of anemia in patients with inflammatory bowel disease (IBD) is iron deficiency. The aim of our study was to evaluate the therapeutic approach of iron deficiency and delivery either intravenously for iron ferric carboxymaltose (FCM) and iron-sucrose complex (IS) or oral preparations for iron deficiency anemia associated with IBD.

Methods: We retrospectively analyzed patients with IBD-related iron deficiency anemia, hospitalized in a tertiary center in North-Eastern Romania between January 1, 2018 through December 31, 2018. Diagnosis of IBD was established based on endoscopic

and histological findings, with biologically documented anemic syndrome (Hb<13 g/dl for males and <12 g/dl for females, MCV<78/fl, MCH<27/pg, iron status – sideremia <50mcg/dl).

Results: The study included 42 patients with IBD-related iron deficiency anemia, mainly males (29–69%), with mean age 44.8±12.8 years. Twenty (47.61%) patients had severe anemia (Hb<8g/dl) and received i.v. iron preparations in the form of iron-sucrose complex (13- 65%) or ferric carboxymaltose (7- 35%), and the remaining 22 (52.38%) patients received oral iron preparations. For all patients, the mean value of hemoglobin at admission was 8.2±1.1g/dl, with lower value in patients requiring i.v. iron preparations. Nine (40.9%) patients with oral iron administration had adverse effects (headache – 3, nausea – 5, constipation – 1) while 6 (30%) patients with i.v. preparations had headache (4 – 66.6%) and injection site reactions (2 – 33.3%). Mean hemoglobin value at discharge was 12.4±1.3g%, with no significant differences (p = 0.063) between patients receiving either i.v. or oral preparations.

Conclusion: Most patients with IBD-related iron deficiency anemia required parenteral iron preparations. Intravenous administration represented a more rapid achievement of Hb with significantly lesser adverse effects compared to oral administration.

23 KEY FEATURES OF BOWEL ULTRASONOGRAPHY IN MANAGING INFLAMMATORY BOWEL DISEASE PATIENTS

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Key words: bowel ultrasound, inflammatory bowel disease

Background: Bowel ultrasonography (BUS) is an accurate imaging method for detecting and monitoring inflammatory bowel disease (IBD) patients [1]. This technique is recommended by current guidelines besides gold standard endoscopic assessment in managing IBD patients [2]. Several BUS characteristics strongly correlate with biological markers of inflammation suggesting that these tests could be used in monitoring IBD patients [3] but is yet unknown how these features predict the patient's evolution.

Methods: Our study included 95 consecutive IBD patients (24 diagnosed with ulcerative colitis, 71 with Crohn's disease) with both active and inactive disease at presentation. IBD diagnosis was established endoscopically and histologically. Patients with superimposed infection (viral or bacterial) and patients that had solely rectal involvement of the disease were excluded. BUS was conducted at baseline by one skilled examiner blinded to biological data. Biological markers were evaluated at baseline and all cases were prospectively followed-up for need of therapy escalation during the next 6 months. The following BUS characteristics were registered in every patient: bowel wall thickness, alteration of wall structure, thickened mucosa or submucosa, presence of hyperechoic spots in the mucosal wall, irregularity of the external wall, Doppler signal, presence of mesenteric hypertrophy, presence of lymph nodes, and an overall assessment of the examination. No special preparation was needed before BUS.

Results: Of all the monitored sonographic features, the following characteristics correlated with the need of increasing treatment in the following 6 months: bowel wall thickness, altered structure of the wall, hypertrophic mucosa, Doppler signal, and the overall assessment of the examination (p<0.001). The presence of the lymph nodes, hyperechoic spots in the mucosa, thickened submucosa and the irregularity of the external wall were not statistically significant correlated with the need of treatment escalation. The strongest correlation with the need for increasing treatment was documented for a mean bowel wall thickness > 5 mm and for Doppler signal presence in the bowel wall (p<0.00001). In the multivariate analysis Doppler signal presence was the only independent predictor for the

need treatment escalation during a 6-month follow-up.

Conclusions: The most important sonographic features with an impact on therapeutic decision making in IBD patients are: bowel wall thickness, Doppler signal, altered stratification of the wall and mesenteric hypertrophy. In our analysis, Doppler signal was the only independent predictor for the need of step-up therapy.

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24 BONE MINERAL DENSITY IN PATIENTS WITH INFLAMMATORY BOWEL DISEASE

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Introduction: Inflammatory bowel disease (IBD), including ulcerative colitis (UC) and Crohn's disease (CD) are associated with low bone mineral density (BMD). Reduction in BMD is associated with increased risk of fractures.

Method: We conducted a prospective study over a period of 3 years (2015-2018) at the Institute of Gastroenterology and Hepatology Iasi, on patients diagnosed with IBD. The assessment of bone density was performed using dual energy X ray absorptiometry (DEXA) in the lumbar spinal column (L2-L4) or in the proximal femur. The results were interpreted according to the T score and we considered the values between -1 and -2.5 to be defining for osteopenia and the values below -2.5 defining for osteoporosis

Results: The study included 110 patients age ranged from 32 to 59 years, 41 female (37,27%) and 69 man (62,72%). 72 suffered from ulcerative colitis, 38 from Crohn's disease, 69 patients (61,25%) had normal BMD values and 41 patients (38,75%) had reduction in bone mass of whom 6 had osteoporosis. The remaining 35 patients had osteopenia (16 with UC and 19 with CD). The most important risk factors for BMD changes (but without statistical significance) were Crohn disease, age, smoking and corticoid therapy, especially in patients on long evolution of IBD.

Conclusion: Patients with IBD (especially with Crohn's disease) have reduced bone mineral density. Several factors are involved (corticoid therapy, age, smoking) but we could not establish a relationship between risk factors and the prevalence of bone mineral density reduction in IBD patients

25 THE PREVALENCE OF NAFLD IN IBD PATIENTS COMPARED TO THE GENERAL POPULATION

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Introduction: Patients with inflammatory bowel disease (IBD) are at higher risk for non-alcoholic fatty liver disease (NAFLD) compared with general population

Methods: We retrospectively analyzed 2 groups: 103 IBD patients evaluated in Institute of Gastroenterology between December 1 2015- December 1 2018 were compared with 95 patients with irritable bowel syndrome (IBS) regarding the hepatic involvement. In all patients anamnesis, liver tests, viral and immunological markers, metabolic profile and abdominal ultrasound were done in order to establish the etiology of hepatic disease.

Results: Of the 103 patients with IBD (63 UC, 50 BC), 30 patients (29.12%) had hepatic diseases: 1 patient was diagnosed with primary sclerosing colangitis, 10 were diagnosed with chronic viral hepatitis, 5 with toxic hepatitis (alcoholic or drug-induced) and 14 with NAFLD. Of the patients diagnosed with IBS there were 19 hepatic disease (20%): 4 viral hepatitis, 6 toxic hepatitis and 9 patients with NAFLD. According to the severity of the IBD (CDAI and Mayo scores), we found that in patients with CD, NAFLD prevailed in those with moderate disease activity, while in patients with UC in those with severe activity. In IBD patients with NAFLD lipid and glycemic disorders were less frequent compare with IBS patients with NAFLD.

Conclusions: NAFLD is more prevalent in IBD compared with IBS patients. Complex pathogenesis of NAFLD in IBD may be related more to chronic inflammation than to metabolic disorders.

26 ANTI -TNF THERAPY IMPROVES ANEMIA IN INFLAMMATORY BOWEL DISEASE

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Introduction: Anemia is a frequently complication of inflammatory bowel disease (IBD). In IBD, anemia results from a combination of complex mechanisms, though iron deficiency and inflammation play major roles. Anemia has been associated with increased healthcare utilization and reduced quality of life in IBD patients.

Methods: We conducted a retrospective study including patients with moderate to severe UC and CD evaluated in Institute of Gastroenterology and Hepatology Iasi between December 1, 2013 and December 1, 2018 assigned to start anti-TNF therapy. Prevalence of anemia was determined prior to starting Infliximab (IFX) or Adalimumab (ADA) and after one year of therapy. Anemia was defined as a hemoglobin level lower than 12 g/dL in women and 13 g/dL in men.

Results: 151 patients (92 CD, 59 UC) met our inclusion criteria. Anti-TNF therapy included IFX in 94 patients (71 CD, 23 UC) and ADA in 66 patients (54 CD, 12 UC).

The overall prevalence of anemia in our population at baseline was 31.2%. Hemoglobin levels were inversely correlated with C-reactive-protein (CRP) levels at baseline ($p < 0.001$). There was no statistically significant association between the presence of anemia at baseline and IBD subtype ($p = 0.31$). After one year of therapy there was a statistically significant decrease in the prevalence of anemia (31.2% vs. 11.0%, $p < 0.005$).

Conclusions: Anemia is a common complication in IBD. Anti-TNF therapy is associated with a decrease in the prevalence of anemia and levels of CRP in moderate to severe IBD. This effect supports the importance of inflammation in the pathogenesis of anemia.

27 CT AND MRI EVALUATION IN COMPLICATED FORMS OF CROHN'S DISEASE: FROM THE TECHNICAL ASPECTS TO THE DIAGNOSTIC

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Objectives: To present the key points of CT and MRI techniques used to evaluate patients with Crohn disease. To list and illustrate the most important CT and MRI features in Crohn disease. To discuss the complications of Crohn disease and the differential diagnosis.

Material and methods: All cases with Crohn disease have been explored in The Radiology and Medical Imaging Department of Fundeni Clinical Institute with dedicated CT and/or MRI protocols used for the evaluation of the digestive tract. The detection and characterization of intestinal lesions on CT and MRI cross-sectional images require appropriate preparation: the gastrointestinal tract should be empty and clean, with the lumen distended using a large amount of intraluminal contrast material for better visualization of the anatomy and of morphologic changes caused by the disease. Contrast material is injected intravenously to demonstrate the presence of lesions and to help assess their inflammatory activity.

Results: The normal thickness of the wall of the small intestine and colon is 1–2 mm and 3 mm, respectively, when the lumen is distended. Any portion of the bowel wall that exceeds 4–5 mm is considered abnormal. We have analyzed in all patients with proved or suspected Crohn disease, the presence and character of a pathologically altered bowel segment (wall thickness, pattern of attenuation/signal intensity, degree of enhancement, length of involvement), the number of lesions, stenosis and prestenotic dilatation, skip lesions, fistulas, abscess, fibrofatty proliferation, increased vascularity of the vasa recta (comb sign), mesenteric adenopathy, and other extraintestinal disease involvement. The diagnostic of Crohn disease include assessment of the presence, severity, and extent of disease, inflammatory lesion activity, and the presence of extraintestinal complications.

Conclusions: CT and MRI with intraluminal and intravenous contrast material allow correct assessment of the severity, extent, and inflammatory activity of Crohn lesions and of the presence of extraintestinal complications such as phlegmon, abscesses, sinus tracts, and fistulas, but are limited in the depiction of subtle mucosal lesions.

Key words: CT and MRI evaluation and findings, Crohn disease

28 ANTI-TNF TREATMENT (ZESSLY) IN A PATIENT WITH ULCERATIVE COLITIS AND LIVER CIRRHOSIS – CASE PRESENTATION

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Introduction: Liver diseases are common extraintestinal manifestations in inflammatory bowel diseases (IBD). The most associated hepatobiliary manifestations are: primary sclerosing cholangitis, cholelithiasis, steatosis, hepatic amyloidosis, portal vein thrombosis; one major concern is hepatic involvement related to IBD treatment: drug induced hepatotoxicity and reactivation of hepatitis B and C due to immunosuppressive treatment.

Case presentation: We present a 60 years old male patient, diagnosed with compensated alcoholic liver cirrhosis Child –Pugh A in 2012 and with pancolonic ulcerative colitis in 2017. He had 3 severe flares of ulcerative colitis treated with corticosteroids as induction and 5-ASA as maintaining therapy. In 2018 treatment with Azathioprine has been initiated, but after 2 weeks the patient developed hepatotoxicity with transaminases more than three times the ULN, so the immunomodulator was stopped. In 2019 he presented with a new severe flare (Mayo score 9) and anti – TNF treatment with infliximab biosimilar – Zessly was initiated. 6 weeks later the patient was in clinical and biological remission with no sign of hepatic toxicity.

Conclusion. The treatment of IBD patients with associated hepatic diseases can be challenging due to hepatic toxicity of the drugs used. In our case the biosimilar of Infliximab – Zessly was effective and safe as induction therapy in a patient with severe pancolonic ulcerative colitis and alcoholic liver cirrhosis. Close monitoring of the both diseases is mandatory in the future.

29 PECULIARITIES OF THERAPEUTIC APPROACH IN INFLAMMATORY BOWEL DISEASE PATIENTS IN A TERTIARY REFERRAL CENTER FROM NORTH-EASTERN ROMANIA

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Background: Inflammatory bowel disease (IBD) is a chronic and heterogeneous disorder characterized by remitting and relapsing periods of activity. Although there has been much progress in the management of IBD with established and evolving therapies, the choice of an applicable therapy is one of many issues regarding these patients. Therefore, the treatment approach and follow-up of patients have undergone a significant change. The aim of this study was to assess the main treatment approach in patients with IBD in a tertiary referral center.

Material and Methods: All cases of IBD hospitalized in our tertiary referral center from January 2012 to June 2017 were included in the study. Demographics, clinical characteristics and disease severity along with type of medication were assessed.

Results: In this study we included 329 IBD patients, most of them males (58.97%), mean age 44.11 ±15.51, predominantly with ulcerative colitis (UC) (69.3%). The majority of IBD patients were

treated with 5-aminosalicylates (5-ASA), most of them being with UC (76.17%). Corticosteroids were recommended in 209 (63.53%) cases, especially in patients with UC compared with those with Crohn's disease (CD) (61.72% vs. 38.26%). Immunomodulators were used in about 23.71% of all cases predominantly in CD patients (56.4% vs. 43.5%). Out of all 329 patients, 70 (21.28%) received biological therapy, with Adalimumab being the most used agent (66.2% vs. 33.8%).

Conclusion: The treatment landscape for IBD is rapidly evolving with the recent validation of innovative biologics.

we performed an MRI which described inflammatory alterations compatible to sacroiliitis as an extraintestinal manifestation of Crohn's disease. He was also tested for HLA-B27 which was positive. We initiated treatment with Adalimumab and obtained clinical and endoscopic remission within the last one year and a half. Discussions. Emerging adulthood (age 18 to 25) is often considered an unstable period between adolescence and full adulthood. Emerging adults with IBD have an increased risk for disease progression and other complications and poorer adherence to treatment.

Conclusions: The management of Crohn's disease in younger patients is very similar to that of adults.

30 MALIGNANCIES IN PATIENTS WITH INFLAMMATORY BOWEL DISEASE: A SINGLE-CENTRE EXPERIENCE

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Background: Gastrointestinal and extraintestinal malignancies are long-term complications in patients with inflammatory bowel disease (IBD), likely as a result of chronic inflammation and the use of immunosuppressive medications used to control inflammation. The aim of this study was to assess the frequency of malignancies in IBD patients admitted in a tertiary referral center.

Methods: We performed a retrospective analysis of data from 331 IBD patients admitted to our tertiary referral center in North Eastern Romania between January 2011 and June 2017. Demographic, clinical, laboratory characteristics and disease severity along with type of medication were carefully collected from the patients' medical charts.

Results: The study population included 331 IBD patients (mean age 43.11±14.21 years), predominantly male patients (58.9%). Amongst them, 9 (2.71%) patients developed various malignancies, 7 (6.25%) patients being diagnosed with ulcerative colitis (UC). The main malignancies identified were gastric adenocarcinoma (2 cases), urothelial carcinoma (1 case), pancreatic cancer (2 case), basal cell carcinoma (2 cases), breast cancer (1 case) and uterine cervical adenocarcinoma (1 case). None of the patients that developed a malignancy had received immunosuppressive or biological therapy.

Conclusion: Immunomodulators and biologics appear to be protective against malignancy in IBD patients.

31 CROHN'S DISEASE IN YOUNG ADULT - CASE PRESENTATION

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Introduction: The incidence of inflammatory bowel diseases (IBD) is rising among adolescents and young adults, 25% of the patients having the disease onset prior to the age of 20. Case presentation. We present the case of a 20-year-old man, non-smoker, who has been diagnosed with Crohn's disease at the age of 18 when he presented with chronic diarrhea associated with diffuse abdominal pain. Initially, the blood tests showed moderate inflammation. Serological markers for viral infections were negative. Secondly, stool exams excluded infectious bowel diseases. We performed an upper endoscopy revealing erythematous antral gastritis and colonoscopy which showed stenotic and ulcerated ileocecal valve; through the stenosis multiple ulcerations were visualized in distal ileum; biopsies were taken and the histologic result was consistent with Crohn's disease. As the patient also complained of low back pains,

32 PSYCHO-SOCIAL EFFECTS OF INFLAMMATORY BOWEL DISEASES

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Background: Due to their chronicity and unpredictable clinical course, Inflammatory bowel diseases (IBD), including Crohn's disease and ulcerative colitis (UC), are associated with psychological comorbidity and impaired quality of life. Psychological comorbidities (anxiety, depression, somatisation, perceived stress) could affect the natural history of IBD by playing a role both in the pathophysiology and course of IBD and in how patients deal with these chronic and disabling diseases.

Methods: For all patients we assessed: social and demographical data (age, gender, marital status, living environment, education, professional status, presence of risk behaviors); clinical status (diagnosis and disease activity with MAYO/CDAI scores, duration of evolution, comorbidities, personal medical history, previous and present therapy, level of pain with Numerical rating scales); psychological status (presence of psychological trauma in personal history, presence of stress with PSS scale, anxiety or depressive disorder at the moment of evaluation with HADS scale, coping mechanisms with COPE questionnaire).

Results: The study sample comprised 28 patients, diagnosed with IBD and hospitalized between January 1st and June 30th, 2019 in the Gastroenterology Department of SCJU Craiova. The average age was 38.21±16.87 years; majority males (64.29%); predominantly with UC (85.71%); 78.57% from urban area; 71.43% professionally active; 50% higher education; 35.7% with family psychotrauma; 50% with duration of evolution under 5 years; 14.3% with a moderate level of perceived stress; depression and anxiety as assessed through HADS was present in 14.3%. Coping mechanisms were developed by the subjects, especially on the areas of planning, acceptance and use of social support.

Conclusions: The inflammatory disease has significant effects on the psychological status of the individual affected and our patients have developed coping mechanisms.

33 MATHEMATICAL MODELS FOR INFLAMMATORY BOWEL DISEASE MONITORING

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Introduction: Our aim was to use artificial neural networks (ANN) for assessing inflammatory bowel disease (IBD) activity using various non-invasive (biological and historical) data.

Patients and method: The study group included 175 patients aged 18-80 years, diagnosed with ulcerative colitis (UC) - 68% and Crohn's Disease (CD) - 32% based on clinical, biological, imaging and histopathological criteria. Database contains multiple parameters obtained through anamnesis, physical exam, laboratory tests, imaging investigations. For each patient, we calculated the scores: Ulcerative Colitis Disease Activity Index (UCDAI), Rachmilewitz, Ulcerative Colitis Endoscopic Index of Severity (UCEIS), Geboes (histological score), Crohn's Disease Endoscopic Index of Severity (CDEIS), Simple Endoscopic Score for Crohn's Disease (SES-CD). We built the neural network using MATLAB 7.0 and we measured the accuracy with which the neural network was able to estimate the scores.

Results: The accuracy of the mathematical model was measured in terms of mean square error (MSE) and mean absolute percentage error (MAPE). Calculated MAPE values for UCDAI score and Rachmilewitz score were 30,23% and 41,16% respectively. The UCDAI and Rachmilewitz score were estimated with average accuracy. None of the scores were estimated with excellent or high precision because the network included currently few registered patients.

Conclusion: The partial results obtained in the first stage of this study are encouraging given the small number of patients enrolled. Thus, for the next phases of the study, with the ongoing development of the database, we expect to achieve results with higher accuracy.

34 DIET IN ETIOPATHOGENESIS OF INFLAMMATORY BOWEL DISEASES A RETROSPECTIVE COMPARATIVE STUDY ENROLLING ROMANIAN AND BELGIAN PATIENTS

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Abstract

Background and aims: Inflammatory bowel disease development has been associated to several environmental factors among which diet seems to play a key role. However, in the pathogenesis of IBD no consensus has been reached. The aim of this study is to analyze the dietary pattern in a Romanian and Belgian population with IBD.

Methods: We conducted an observational retrospective case-control study, using two cohorts (Romanian and Belgian). The IBD group was represented by 76 Romanian and 53 Belgian patients with an IBD diagnosis while the control group included 35 Romanian and 21 Belgian similar in age and sex distribution. All subjects were interviewed and asked to fill in a questionnaire regarding diet.

Result: Belgian subjects had a median age of 42 years and a female predominance in both groups. In the Romanian population, a median age of 42 years was registered in the IBD group and 49 years in the control group, with a similar and relatively equal sex distribution (52.6% men vs. 47.6%, $p=0.701$). Compared to the control group, in the Romanian IBD group we found significantly higher consumption of moderate/excessive amounts of salt (89.5% vs. 52.4%, $p<0.001$), sweets and sweetened beverages (50% vs. 14.30%, $p<0.001$), processed meat (63.2% vs. 28.6%, $p<0.001$), high fat meat (52.6% vs 19% , $p<0.001$) and fried foods (60.5% vs 4.8%, $p<0.001$). Data showed a significantly lower intake of seeds and nuts and yogurt in IBD Romanian patients comparing to the healthy subjects (15.8% vs. 52.4%, $p<0.001$; 26.3% vs 47.6%, $p=0.026$). In the Belgian cohort, the results indicate a significantly lower percentage of subjects who consume vegetables and fruits in the IBD group comparing to control group (30.2% vs 59.1%, $p=0.019$) but a higher percentage is obtained

in case of margarine consumption (45.3% vs 13.6%, $p=0.009$)

Conclusion: In Romanian IBD patients, the consumption of sweets and sweetened beverages, processed food, high fat meat, fried food and salt was higher than in the general population, and that of seeds, nuts and yoghurt lower. In the Belgian cohort, IBD subjects consumed less vegetables and fruits but higher amounts of margarine.

35 ENVIRONMENTAL FACTORS IN ROMANIAN AND BELGIAN IBD PATIENTS- A CASE-CONTROL STUDY

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Abstract

Background: Several environmental factors have been associated with IBD onset: smoking, hygiene, microorganisms; oral contraceptive pills (OCPs), non-steroid anti-inflammatory drugs, antibiotics, appendectomy, diet, breastfeeding, vitamin D, stress and ambient air pollution. The aim of this study was to investigate the prevalence of these factors in a Romanian and Belgian population with IBD.

Material and methods: 76 Romanian and 53 Belgian patients with an IBD diagnosis participated in an interview, and were asked to fill in a questionnaire regarding environmental factors before and after the onset of IBD. 35 Romanian and 21 Belgian healthy individuals constituted the control group.

Results: A total of 40 patients with Ulcerative Colitis (UC) and 89 with Crohn's Disease (CD) were included. Gender distribution was 43% males and 57% females. They had a median age of 42 years (range between 19-74 years), a median disease duration of 8 years and 79% were in clinical remission. Both Romanian and Belgian IBD patients reported increased antibiotic consumption before the onset of IBD, compared to controls: 58% vs 10% ($p<0.001$), respectively 51% vs 5% ($p<0.001$). Belgian patients with IBD declared significantly more frequent OCPs consumption (53% vs 9% - $p<0.001$), they were breastfed in a lower proportion (49% vs 76% - $p<0.001$) and had experienced higher level of psychosocial stress ($p<0.001$).

Conclusions: Antibiotic consumption before IBD onset may play a pivotal role in IBD development in both Romanian and Belgian populations. In Belgian patients, OCP consumption, higher level of psychosocial stress and lack of breastfeeding may also be also involved.

36 CHRON'S DISEASE COMPLICATED BY STRICTURES: CURRENT CLINICAL PRACTICE AND ROLE OF BIOLOGIC TREATMENT - A CASE REPORT AND A SINGLE CENTRE EXPERIENCE

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Introduction: Crohn's disease (CD) is a chronic idiopathic disease

characterized by inflammatory-driven symptoms. The frequency of fibrosis and stenotic complications increases over the long course of the disease.

Case report: We present the case of a 36 year old female patient, known with stricturing CD, with a history of perianal abscesses and right hemicolectomy after intestinal occlusion.

The patient is currently under treatment with 5-aminoasalyclates and biologic therapy with Infliximab. In her medical history, we note the adverse effect developed to Azathioprine, with acute hepatic injury, which led to the discontinuation of treatment, and a one year treatment with Adalimumab, which was afterwards switched to Infliximab.

One year after starting biologic therapy with Infliximab, the course of disease worsened, with the recurrence of the anemic syndrome, with severe iron deficiency and malabsorption, severe intermittent abdominal pain with subocclusive symptoms, with a lack of improvement after accelerating Infliximab dosing rate. Entero-MRI was performed, revealing ileal stricture with stenotizing character, on a length of up to 7 cm. Surgical treatment with small bowel resection was performed.

Based on this case report, we analyzed whether the introduction of biological agents influenced the treatment strategies in patients in our centre who required a second surgery.

Conclusions: None of the currently available drugs in our country seem to be the best strategy to avoid postoperative recurrence of CD, therefore further studies should be conducted.

37 INCIDENTAL SMALL BOWEL LYMPHANGIECTASIA DETECTED AT CAPSULE ENDOSCOPY – IS THERE A CLINICAL SIGNIFICANCE?

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Introduction: Small bowel (SB) lymphangiectasia classically consists in dilated intestinal lacteals causing loss of lymph into the lumen and, consequently, oedema, hypoproteinemia, hypoalbuminemia. Most lymphangiectasia in adults detected in recent years, however, appears to have few or no clinical features of malabsorption.

Aim: We aimed to assess frequency and clinical significance of SB lymphangiectasia detected by small bowel capsule endoscopy (SBCE).

Patients and methods: We retrospectively studied all cases of patients investigated by SBCE in the last three years in a tertiary referral center. We noted the frequency of SB lymphangiectasia and the correlation with the clinical context.

Results: 146 SBCE exams were performed for different indications, mainly obscure gastrointestinal bleeding, iron deficiency anemia, suspected Crohn's disease, suspicion of SB tumors. In 16 cases (11%), macroscopic appearance suggestive of SB lymphangiectasia was noted, with similar frequency among the different types of indication. In 15 cases, the aspect consisted mainly in scattered pinpoint white spots, and no correlation with the clinical picture was made. One single case of suspected SB lymphangiectasia, with more extensive whitish macules and nodules needed an extended work-up differential diagnosis and was referred for further investigations.

Conclusion: Incidental non-clinically significant SB lymphangiectasia appears to be not uncommon in patients undergoing SBCE. However, given that an underlying serious condition may exist, especially if clinical suspicion exists, in some cases a careful work-up however must be made.

38 EFFICACY OF INTRAVENOUS IRON SUPPLEMENTATION IN THE MANAGEMENT OF ANEMIA IN PATIENTS WITH IBD: A RETROSPECTIVE MONOCENTRIC STUDY

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Background: Anemia is a common complication of inflammatory bowel diseases (IBD), with a multifactorial and complex etiology, most frequently involving a combination of iron deficiency anemia and anemia of chronic disease.

Even though it has important consequences on the clinical status of the patients and a negative impact on the quality of life, anemia is often overlooked by the clinicians.

Aims: The aim of this study is to evaluate the efficacy of intravenous iron supplementation in the correction of anemia in patients with IBD.

Materials and methods: We analysed 112 patients diagnosed with anemia associated to IBD (inpatients and outpatients) that were evaluated in the Gastroenterology Department of Fundeni Clinical Institute within the last year (01 August 2018 – 01 August 2019) and received intravenous iron supplementation (according to ECCO recommendations for iron supplementation in IBD).

Patients were diagnosed with anemia according to WHO definition of anemia.

The median age was 29 years, and 54% were women, with mean duration of disease of 3.4 years. The mean hemoglobin level was 9.3g/dL (7.1 – 11.5, 95% CI). 83 (74.1%) patients had active disease when evaluated and 29 (25.9%) were in remission.

Initial hemoglobin levels were compared to the level of hemoglobin achieved after iron supplementation. Due to the retrospective nature of the study, the interval between evaluations was variable (median number of days=29).

Results: Patients with active disease had significantly lower Hb levels (mean Hb=8.8g/dL; 6.6 – 9.4, 95% CI) compared to patients in remission (mean Hb=10.2; 9.6 – 10.8, 95% CI), p<0.005, at the initial evaluation.

When reevaluated after the iron supplementation, the Hb level significantly increased in 94 patients (84%), with a mean Hb level of 11.4 g/dL (10.2 – 12.6, 95% CI) compared to 9.3 g/dL before treatment (p=0.001).

Patients that were in remission at the first evaluation had a higher increase in Hb levels (mean Hb=12.7 g/dL, 2.5 g/dL increase) compared to patients with active disease (mean Hb=10.9 g/dL, 2.1 g/dL increase), p<0.01.

Conclusions: Iron supplementation is highly efficient in correcting anemia in patients with IBD.

Patients in remission who had mainly anemia due to iron deficiency achieved a higher increase of the hemoglobin value compared to patients with active disease, who had anemia of mixed etiology (iron deficiency and chronic disease).

The increase of hemoglobin levels in patients with active disease can be also attributed to the optimization of the treatment, which decreased the inflammatory syndrome and induced mucosal healing with, lowering the blood loss.

39 THE IMPACT OF AGE AT DIAGNOSIS ON MUCOSAL GENE EXPRESSION PROFILES IN INFLAMMATORY BOWEL DISEASES.

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Abstract: Introduction: Inflammatory bowel diseases (IBD) can occur in all age categories of patients, with different evolution and response to treatments being observed in these categories. While older patients tend to have a milder disease, a lower age at disease onset has been associated to more debilitating disease. In this study we aimed to determine mucosal markers differentiating two different categories of IBD patients based on age at disease onset, according to Montreal classification.

Patients and Methods: The difference in gene expression profiles of inflamed mucosa from twenty patients with age at disease onset (AAO) above 40 years and twenty-three with AAO under 40 years was analyzed through the qPCR evaluating a panel of 84 genes previously associated to IBD. We also performed a subgroup analysis on eight treatment-naïve patients distributed equally in the two groups.

Results: We found a significant up-regulation of five genes (CXCL1, TFF1, CXCL3, CXCL2, CXCL11) and a significant down-regulation of other five genes (DEFA5, ABCB1, GCG, TYK2, IL13) in AAO>40 as compared to AAO<40. In the treatment-naïve analysis, comparing the same age groups, we identified significant down-regulation of six genes (CX3CL1, TYK2, LTB, LYZ, IRF5, STAT3) and a significant up-regulation of one gene – CXCL3.

Conclusions: These observations regarding transcriptomic differences induced by the age at disease onset in IBD patients, confirmed in larger cohorts, might help in clarifying the mechanisms by which disease evolution and treatment response vary between age groups. It might also serve as a starting point for tailored treatment in IBD.

40 REFRACTORY LEFT COLITIS TREATED WITH ADALIMUMAB (HYRIMOZ)- A CASE REPORT

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Introduction: Adalimumab is a recombinant human IgG1 monoclonal antibody that acts by inhibiting TNF (Tumour Necrosis Factor). We present a case report that describes our experience using this biologic agent in a patient with ulcerative colitis.

Material and method: We diagnosed in April 2017 a 56-year-old patient with left colitis after an atypical debut: occlusion by fibrotic stenosis at 20 cm from the anal marge, solved with an iliac stoma. Afterwards, he was referred to Gastroenterology Department, with rectal bleeding, evaluated by colonoscopy, which revealed a proctosigmoiditis in active phase. The patient started the treatment with oral corticoids and 5-ASA, without improvement. In May 2018, we added azathioprine, without a significant change. In December

2018 we started therapy with infliximab that slightly improved the symptoms- rectorrhagia, arthralgia, anorexia. In May 2019, due to lack of response to infliximab, and decrease of haemoglobin of 2 g/dl, total antibodies against infliximab were dosed, showing a 10-times higher concentration. We switched to adalimumab, 160 mg in the first week, 80 mg two weeks after, followed by 40 mg each 8 weeks.

Results: At present, after the 3rd injection, the status of patient has improved, without any bleeding.

Discussion: Adalimumab is useful for patients who have lost response to infliximab.

Most of the patients suffering from medically refractory ulcerative colitis would prefer the switch to another biologic agent rather than surgery.

Conclusion: Adalimumab is efficacious in patients with refractory ulcerative colitis, its use is of particular benefit in non-responders to infliximab.

41

IBD: FOCUS ON FATIGUE

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Introduction: Fatigue is a common extraintestinal symptom experienced by patients with inflammatory bowel disease (IBD) which affects quality of life (QoL) and it depends on several factors. Aim of the study: assess the presence and level of fatigue in IBD patients and to analyse the relationship between fatigue and disease characteristics.

Material and Method: The study included 105 patients with IBD admitted between January 2018 – June 2019 to our hospital and outpatient clinic. Demographic data, Montreal classification, disease activity, laboratory data, types of treatments, QoL and fatigue were recorded at admission. Disease activity was assessed by endoscopic scores of activity and fecal calprotectin. QoL was assessed by SIBDQ. Fatigue was assessed by IBD-F.

Statistics: Spearman, Chi-square, Fisher, Mann-Whitney.

Results: In CD, fatigue was present in 92.5% of the patients with active disease and in 80% of those with inactive disease (p<0.05). In UC, fatigue was present in 93.7% of the patients with active UC and in 83.3% of those with inactive UC (p<0.05). In active CD, higher scores of fatigue were associated with female gender (p<0.05), ileal location (p<0.05) and anemia (p<0.05). In active UC, higher scores of fatigue were associated only with anemia (p<0.05). In patients with IBD in remission, fatigue had lower scores than in patients with active disease (p<0.05). There was a strong negative correlation between IBD-F and SIBDQ (r=-0.78, p<0.05). Regarding association with treatment, higher scores of fatigue were observed in patients receiving corticosteroids (p<0.05) or thiopurines (p<0.05).

Conclusions : Fatigue is present in both IBD irrespective of disease activity, is more frequent in CD and affects QoL. Factors associated with severity of fatigue were disease activity and presence of anemia.

42 EVALUATION OF IBS-LIKE SYMPTOMS IN PATIENTS WITH IBD IN REMISSION

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Introduction: Inflammatory bowel disease (IBD) patients often report gastrointestinal symptoms without objective evidence of ongoing disease activity. This is a common clinical dilemma for both physicians and patients because it could be due to occult inflammation or it could be classified as Irritable bowel syndrome (IBS)-like symptoms.

Aim: to assess the frequency and severity of IBS-like symptoms in patients with IBD in remission.

Material and method: The study included 40 patients with IBD in remission and IBS-like symptoms (abdominal pain, bloating and diarrhea) admitted in 2018 to our outpatient clinic. Other organic causes of these symptoms were excluded. Remission was defined as SES-CD<2 or Mayo endoscopic=0 or 1 and fecal caproectin<50 µg/g. Visual Analogue Scale (VAS) was used to assess the severity of abdominal pain and bloating and Bristol Stool Form (BSF) to assess the consistency of stools. Additionally, clinical activity indices (CDAI and partial Mayo score), QoL (SIBDQ) and types of treatment were recorded.

Results: Out of 97 patients with IBD in remission, 40 patients (29 patients with CD and 11 with UC) had IBS-like symptoms. In both diseases, bloating had the highest mean score, followed by abdominal pain in CD and stool consistency in UC. In CD, 68.9% of the patients with IBS-like symptoms had CDAI >150 (p<0.05). In UC, only 2 patients had partial Mayo score > 2. QoL had lower scores in both diseases. There was no association between IBS-like symptoms and gender, age or treatment in both diseases (p>0.05).

Conclusions: The frequency of IBS-like symptoms in patients with IBD in remission was 41,2% and these symptoms are more frequent in CD than in UC. Bloating is the worst IBS-like symptom reported by patients. IBS-like symptoms affects QoL in both diseases.

is no significant increase in infection rates [2]. The prevalence of methicillin-resistant *Staphylococcus aureus* (MRSA) is 1.4-fold higher in hospitalized IBD patients [3].

Case-report: We report the case of a 29 year-old female who presented with celsian signs in the right breast and fever (38C) for 3 days. The medical history reveals cutaneous psoriasis (for 20 years) and severe ulcerative pancolitis (MAYO score= 11 points) diagnosed 4months prior the presentation. Since the disease did not respond to early corticotherapy with Methylprednisolone (no response within 3 days), we opted for Infliximab and Azathioprine (after infections screening was performed) associated with oral Mesalazine. Under treatment there was a clinical and biological remission at 3months. At presentation breast ultrasound revealed non-puerperal primary breast abscess. Vancomycin and Metronidazole were started and 12 hours later surgery was performed with catheter placement and cultures showing MRSA. Antibiotic treatment was continued for 14 days with constant wound cleaning. Biological treatment was stopped, the patient was kept on Azathioprine with clinical and endoscopic remission at 6months from diagnosis.

Conclusion: Adverse effects should be taken into consideration whenever opting for biological treatment. Therefore any sign of infection in a patient under biological treatment should impose consecutive investigations.

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44 QUALITY OF COLONOSCOPY PREPARATION IN INFLAMMATORY BOWEL DISEASE PATIENTS: RETROSPECTIVE ANALYSIS OF 348 COLONOSCOPIES

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Abstract

Background : Bowel preparation is essential for an adequate colonoscopic examination. A successful colonoscopy implies diagnostic accuracy while considering patient safety, duration of the procedure and associated costs. With proper patient instruction and following best-practice evidence, the preparation is still inadequate in up to 25 percent of examinations[,]. Few studies have addressed colonoscopy preparation in inflammatory bowel disease (IBD) patients [,], and it remains unclear whether disease activity has any significant impact on the quality of bowel preparation.

Aim: To prospectively assess bowel preparation in IBD patients and determine the impact of disease-related factors on preparation efficacy.

Methods: We conducted a retrospective analysis of prospectively collected data from a cohort of IBD patients enrolled in an observational cohort study at a tertiary center in Bucharest, Romania. Patients were evaluated every 12 months (unless unscheduled visits took place in case of relapse), and each study visit including the collection of clinical, biological, endoscopic and quality of life data. Disease activity was assessed using CRP measurements and clinical activity scores (Mayo and Crohn's Disease Activity Index (CDAI) for UC and CD, respectively). Endoscopic activity was assessed using the

43 MRSA NON-PUERPERAL BREAST ABSCESS: A RARE COMPLICATION OF BIOLOGICAL TREATMENT IN SEVERE ULCERATIVE COLITIS

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Introduction: Treatment of inflammatory bowel (IBD) diseases was revolutionized by the appearance of tumor necrosis factor-α inhibitors. Even though their efficacy is high, side effects should not be overlooked, infection remaining the most frequently encountered side effect (including reactivation of latent tuberculosis) [1]. When combining anti-TNFα agents with other immunomodulators there

Mayo and SESCD scores, respectively. The Boston bowel preparation scale (BBPS) was used to assess the quality of bowel preparation.

Results: We reviewed 348 colonoscopies from 169 consecutive patients (59 CD, 110 UC) enrolled in our cohort study between 2013-2018 and prospectively followed for a median length of 2 years (0-6 years). We excluded patients with prior IBD-related surgery, stomas or study visits during which complete colonoscopy was not indicated because of concomitant medical conditions (i.e., a severe disease flare-up).. Furthermore, per the study protocol, patients were evaluated with the aim of assessing disease activity. Screening colonoscopies for high-risk patients using chromoendoscopy and targeted biopsies were not included in this protocol because they were evaluated separately.

The median total Boston score in our cohort was 6 (range 0-9), (≥ 6 considered optimal), and the median score per bowel segment (left colon, transverse colon, right colon) was 2, with scores ≥ 2 per segment considered optimal (maximum 3). There was no difference in bowel prep between patients with endoscopic activity and patients with mucosal healing (median total Boston score 6, $p=0.09$, Mann-Whitney U test). Disease extent, endoscopic activity, patient-related parameters (i.e., sex, age) and clinical activity did not influence the quality of bowel preparation.

Conclusions: The quality of bowel preparation in IBD patients was optimal for our cohort, and disease-related parameters did not significantly influence preparation efficacy.

Key words: bowel preparation, inflammatory bowel disease, quality in colonoscopy, Crohn's disease, ulcerative colitis, prospective study

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