ANEMIA IN IBD PATIENTS ASSOCIATED WITH INCREASED HEALTHCARE UTILIZATION

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Introduction: Anemia is a common systemic complication of inflammatory bowel disease (IBD), with reported prevalence up to 74%. Anemia is associated with worse disease outcome and quality of life. The Crohn's and Colitis Foundation recently published an initiative quantifying the healthcare cost of IBD patients. They found that the presence of anemia was associated with higher resource utilization, particularly hospitalization. The purpose of this study was to determine how anemia severity impacts healthcare utilization and if treatment of anemia reduces healthcare utilization.

Methods: An IRB-approved retrospective chart review including patients 18 years of age and older at a tertiary referral center with IBD (Crohn's Disease (CD) or Ulcerative Colitis (UC)) who had a CBC and an encounter with gastroenterology (GI) from 2014–2018. Demographic, laboratory, treatment, and visit data were extracted from electronic records and records were manually reviewed for verification. Anemia and anemia severity were defined by the World Health Organization classification of anemia.

Results: 930 patients with IBD were included in the analysis, with 516 (56%) patients with CD, 409 (44%) with UC, and 5 (0.5%) with unspecified IBD. Of these patients, 502 (54%) had anemia based on lab values, with 194 (39%) having mild anemia, 244 (49%) with moderate anemia, and 64 (13%) with severe anemia. 321 unique patients had at least one admission during this time period. Patients with anemia had more hospitalizations (p=0.0019) and longer hospital stays, averaging 1.9 days longer (p<0.0001), compared to patients with IBD without anemia. Furthermore, patients with severe anemia had an increase in number of hospitalizations (p=0.0169), increased length of stay (p=0.0344) and more GI visits (p=0.043) when compared to patients with less severe anemia. Treatment of anemia did not result in a statistically significant reduction in utilization of care as measured through number of hospitalizations, length of stay, or outpatient visits when compared to patients with anemia who were not treated.

Discussion: Our results demonstrate that the presence of anemia is correlated with increased health care utilization in patients with IBD, with increasing anemia severity associated with a higher utilization of care. Our results also suggest that treating anemia does not reduce health care utilization. Anemia has been associated with increased disease activity and could represent a marker of more severe disease, possibly explaining these associations. Future research is needed to determine if treatment of anemia in IBD results in reduced health care visits and costs.

23 EFFECTS OF VEDOLIZUMAB ON EXTRAINTESTINAL MANIFESTATIONS IN INFLAMMATORY BOWEL DISEASE

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Background: Vedolizumab (VDZ) is an α4β7 integrin monoclonal antibody that is effective for both Crohn's disease (CD) and ulcerative colitis (UC). There is limited data on how vedolizumab's gut selective mechanism impacts extraintestinal manifestations (EIMs) in inflammatory bowel disease (IBD).

Methods: A retrospective study of all IBD patients at our institution who received at least 1 dose of VDZ between 1/1/2014 and 8/1/2019 were included. Primary outcomes were rate of new or worsening EIMs after initiation of VDZ. Secondary outcomes were factors associated with new or worsening EIMs after VDZ. Continuous variables were analyzed using an unpaired student t-test. Categorical variables were analyzed using a chi-square test or Fisher's exact test. A multivariable logistic regression model was built to identify factors associated with EIMs. The final model was obtained by sequentially subtracting variables and retaining variables that were independently associated with EIMs while controlling for other factors. We also identified factors associated with new or worsening of EIMs after VDZ therapy using Fisher's exact testing and univariable logistic regression.

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