ADHERENCE TO GUIDELINES REMAINS POOR AMONG PATIENTS HOSPITALIZED WITH INFLAMMATORY BOWEL DISEASE

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Background: Patients with inflammatory bowel disease (IBD) are at increased risk of hospitalization due to flares or infection. Management of hospitalized patients with IBD flares is challenging, requiring exclusion of infection, prevention of deep venous thrombosis (DVT), and management of the infection if present. We assessed the effect of GI consultation on adherence to guideline recommendations for the management of hospitalized IBD patients at one county teaching hospital in the United States.

Methods: All patients who visited the Emergency Department (ED) with a diagnosis of IBD based on ICD-10 codes in 2016 were identified using electronic medical records. Charts were manually reviewed to confirm a diagnosis of IBD. Among patients with multiple ED visits, only the first visit for an IBD-related complaint was analyzed. We assessed whether testing for Clostridium difficile infection (CDI) was performed, chemical DVT prophylaxis was ordered, and if a gastroenterologist was consulted. Discharge plans, including new narcotic or steroid prescriptions, and follow-up hospitalization within 1 year for IBD-related complaints were collected. Categorical variables were compared using the chi-squared or Fisher’s exact test with SAS 9.4.

Results: Of 117 ED visits reviewed, 77 (66%) visits were for an IBD-related complaint and 56 (73%) of patients were admitted. A gastroenterologist was consulted in 40 (71%) of the hospitalizations. Chemical DVT prophylaxis was administered in 23 (41%) of hospitalizations. There was no difference in DVT prophylaxis rates among patients that did or did not receive gastroenterology consultation (43% vs. 38%, p=0.73). CDI status was assessed in 66% of patients with a higher, but not statistically significant, rate among those receiving consultation from a gastroenterologist (73% vs. 50%, p=0.11). New narcotic and steroid prescriptions upon discharge were given to 32% of patients. There was a change in IBD maintenance medications in 28% of patients with a consulting gastroenterologist versus none of the patients without a gastroenterologist (p=0.02). One-year readmission rates were high among both patients that received and did not receive gastroenterology consultation (45% vs. 63%, p=0.24).

Conclusions: Adherence to guideline recommendations for hospitalized IBD patients remains low. Hospitalized IBD patients are often discharged with new narcotic or steroid prescriptions. Gastroenterology consultation is significantly more likely result in a change of the patient’s IBD maintenance medications but does not improve the utilization of chemoprophylaxis for DVT. All patients with IBD have a high risk of readmission at 1 year, regardless of whether or not a gastroenterologist was consulted during hospitalization. More work is necessary to increase adherence to guidelines for these patients among all inpatient providers.

Mo1770

THE FACTORS ASSOCIATED WITH THE LEVELS OF PHYSICAL ACTIVITY IN ADOLESCENTS WITH INFLAMMATORY BOWEL DISEASE

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Background: Physical activity has proven benefits on inflammatory bowel disease (IBD), as it contributes to the reduction of serum inflammatory markers. In a previous study, we showed that only 30.6% of pediatric IBD patients reached the daily 60 minutes target of moderate-to-vigorous physical activity (MVPA) recommended by the Canadian 24-Hour Movement Guidelines.

Aims: The primary aim was to investigate the clinical and familial factors that might influence the physical activity level (PAL) in IBD adolescents. The secondary aim was to assess the association between PAL and patient’s body mass index (BMI).

Methods: From June to November 2018, adolescents with IBD, aged ≥12 years, were included in the study. The patients and their parents were prospectively surveyed during outpatient visits. Patients’ PALs were assessed using the Canadian Health Measures Survey - Physical Activity Movement Guidelines.

Results: We included 138 patients (79 males; mean (SD) age 15.3 (1.6) years, 95 (68.8%) diagnosed with Crohn’s disease and 32 (23.2%) with ulcerative colitis). The mean (SD) disease duration at time of inclusion was 2.8 (2.7) years. Overall, 54% were in remission according to the Pediatric Crohn Disease Activity Index or Pediatric Ulcerative Colitis Activity Index (score ≤10). According to the Canadian MVPA target, 9(65.9%) of the patients were considered as sedentary, 21(15.2%) as moderately active and 26(18.8%) as active.

Mo1769

OPIOID USAGE AND PATIENT-REPORTED PAIN SCORES IN INFLAMMATORY BOWEL DISEASE PATIENTS: A RETROSPECTIVE ANALYSIS OF A LARGE US ELECTRONIC HEALTH RECORD DATABASE.

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Objectives: Inflammatory bowel disease (IBD) is a complex gastro-intestinal disorder, a term used to encompass Crohn’s Disease (CD) and Ulcerative Colitis (UC). It is often characterized by abdominal and other pain negatively impacting a patient’s quality of life. One method of managing pain is with certain medications. Further, opioid-based medications characterized by abdominal and other pain negatively impacting a patient’s quality of life. One method of managing pain is with certain medications. Further, opioid-based medications characterized by abdominal and other pain negatively impacting a patient’s quality of life.

Methods: This retrospective study examined data from a U.S. electronic health record database (Cerner Health Facts®). Each patient visit (age ≥18 years) with a principal inpatient or outpatient ICD9/10 diagnosis of IBD between 2011 and 2016 were included in the analysis. Visit-based data for medications of all inpatient stays. Pain scores were available in 14% (N=73,906) of the total visits with opioid use' leading to potential complications such as narcotic bowel syndrome or an opiate induced peak in IBD cohort stratification by visit type, opioid administration and patient-reported pain scores.
as vigorously active. None of the following clinical factors showed association with the PAL, whether as a continuous variable or according to the MVPA cutoff disease phenotype and activity: abdominal pain, anemia, arthralgia, arthritis, age at diagnosis and age at visit. As for familial factors, no association was found between parents’ BMI and patients’ PAL. Moreover, patients in the vigorously active group had the lowest BMI as compared to patients in moderately active and sedentary groups, with respective median (interquartile range) BMIs of 19.8 (18.3 - 21.3), 22.4 (20.3 - 24.4), and 20.4 (18.9 - 23.3) kg/m². P=0.0243

Conclusions: Our study showed no association between clinical or familial factors and PAL in pediatric IBD patients. Thus, further physical activity recommendations from health providers are needed to help enhance PAL in all children diagnosed with IBD regardless of disease activity.

Mo1773

INCREASED HEALTHCARE UTILIZATION BY MEDICAID PATIENTS WITH INFLAMMATORY BOWEL DISEASE

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Background: Low socioeconomic status has been linked with numerous poor health outcomes, but there is little data regarding the impact of insurance status on inflammatory bowel disease (IBD) outcomes. We aimed to characterize utilization of healthcare resources by IBD patients based on health insurance status, using Medicaid enrollment as a proxy for low socioeconomic status. Methods: We identified all adult patients with IBD engaged in a colorectal cancer surveillance colonoscopy program at an urban, quaternary care center from January 2007 to June 2016. We retrospectively reviewed medical records for demographics, insurance status, and IBD-associated variables. Our primary outcomes included IBD-related emergency department (ED) visits, inpatient hospitalizations, biologic infusions, and steroid exposure stratified by insurance status. We compared patients who had ever been enrolled in Medicaid to all other patients. Results: Of 947 patients with IBD engaged in a colorectal cancer surveillance colonoscopy program, 221 (23%) ever had Medicaid (Table 1). Compared to other insurance, Medicaid patients had significantly higher rates of ever being admitted to the hospital (78% vs. 45%, p=0.001) or ever visiting the ED (91% vs. 38%, p=0.001). When adjusted for sex, age at first colonoscopy, race, and ethnicity, Medicaid patients had a higher rate of inpatient hospitalizations (Rate ratio [RR] 2.95; 95% CI 2.59-3.36) and ED visits (RR 4.24; 95% CI 3.82-4.70) compared to patients with other insurance (Table 2). Medicaid patients had significantly higher prevalence of requiring steroids (62% vs. 38%, p<0.001) and after adjusting for sex, age at first colonoscopy, race, and ethnicity, the odds of requiring steroids in the Medicaid population was increased (OR 3.77; 95% CI 2.53-5.62; p=0.001) and after adjusting for sex, age at first colonoscopy, race, and ethnicity, Medicaid patients had a higher rate of inpatient hospitalizations (Rate ratio [RR] 2.95; 95% CI 2.59-3.36) and ED visits (RR 4.24; 95% CI 3.82-4.70) compared to patients with other insurance (Table 2).

When adjusted for sex, age at first colonoscopy, race, and ethnicity, Medicaid patients had significantly higher prevalence of requiring steroids (62% vs. 38%, p<0.001) and after adjusting for sex, age at first colonoscopy, race, and ethnicity, the odds of requiring steroids in the Medicaid population was increased (OR 3.77; 95% CI 2.53-5.62; p=0.001) and after adjusting for sex, age at first colonoscopy, race, and ethnicity, Medicaid patients had a higher rate of inpatient hospitalizations (Rate ratio [RR] 2.95; 95% CI 2.59-3.36) and ED visits (RR 4.24; 95% CI 3.82-4.70) compared to patients with other insurance (Table 2).

Conclusions: Our study showed no association between clinical or familial factors and PAL in pediatric IBD patients. Thus, further physical activity recommendations from health providers are needed to help enhance PAL in all children diagnosed with IBD regardless of disease activity.

Mo1773

COST DRIVERS AND TRENDS IN INFLAMMATORY BOWEL DISEASES

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Background: The Crohn’s & Colitis Foundation’s Cost of Inflammatory Bowel Disease (IBD) Care Initiative seeks to quantify the wide-ranging healthcare costs affecting patients living with IBD. We aimed to (1) describe the annualized direct and indirect costs of care for patients with Crohn’s disease (CD) or ulcerative colitis (UC), (2) determine the longitudinal drivers of these costs, and (3) characterize the cost of care for newly diagnosed patients. Methods: We analyzed the Optum Research Database from the years 2007 to 2016, representing commercially- and Medicare Advantage-insured patients in the United States. Inclusion for the study was limited to those who had continuous enrollment with medical and pharmacy benefit coverage for at least 24 months (12 months prior through 12 months after the index date of diagnosis). Workplace productivity loss was calculated as number of hours lost due to health care encounters multiplied by the patients’ estimated average wage derived from the Bureau of Labor Statistics. Comparisons between IBD patients and non-IBD patients were analyzed based on demographics, health plan type, and length of follow-up. We used generalized linear models to estimate the association between total annual costs and various patient variables. Results: There were 52,782 IBD patients (20,062 UC; 22,720 CD) included in the analysis in 54% 1 females). On a per-annual basis, patients with IBD incurred over a three-fold higher direct cost of care compared to non-IBD controls ($2,987 vs $979 per-member per-year paid claims) and more than twice the out-of-pocket costs ($2,213 vs $979 per-year reported costs) (Figure 1), with all-cause IBD costs rising after 2013 (Figure 2). Patients with IBD also experienced significantly higher costs associated with workplace productivity losses as compared to controls. The study identified several key drivers of cost for IBD patients: treatment with specific therapeutics (biologics, narcotics, or steroids), emergency department use, and healthcare service utilization associated with relapsing disease, anemia, or mental health condition. Additionally, the study found that annual costs of care were highest during the first year of the initial IBD diagnosis (mean >$23,000). Conclusions: The costs of care for IBD have increased in the last 5 years and are driven by specific therapeutics and disease features. In addition, compared to non-IBD controls, IBD patients are increasingly incurring higher costs associated with healthcare utilization, out-of-pocket expenditures, and workplace productivity losses. There is a pressing need for cost-effective strategies to address these burdens on patients and families affected by IBD.

Mo1773

Figure 1. Yearly Cost by Site of Service and Patient Costs