BASELINE CHARACTERISTICS OF PATIENT ADMITTED WITH MICROSCOPIC COLITIS

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INTRODUCTION

- Microscopic colitis (MC) is a chronic inflammatory disease of the colon causing frequent watery diarrhea, abdominal pain, nocturnal diarrhea, urgency and fecal incontinence.
- Once known to be rare now MC is one of the most common causes of chronic watery diarrhea in adult population which leads to poor quality of life and increase health care cost burden. So, we decided to identify baseline characteristics and incidence of microscopic colitis in adult population.

METHODS

- Adult patients admitted with MC were analyzed from 2016 - 2019 using the National Inpatient Sample database.
- The primary outcome was to determine the baseline characteristics of patients admitted with MC. Secondary outcome was to determine the disease burden in hospitalized patient population.
- SAS 9.4software was used for statistical analysis.
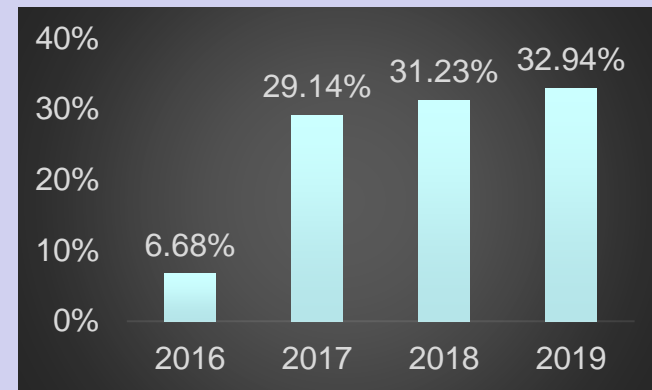
RESULTS

- Total 35,685 patients were admitted with MC during our study period.
- MC cohort comprise of predominantly elders, with mean age of 71.2 ± 13.7 yrs. MC was found to be more prevalent in Caucasian (89.6%) females(77.4%) compared to male (22.6%).
- We also observed significant increasing trend in hospitalization secondary to MC through 2016 to 2019.
- Comorbidities like hypertension (62.8%), coronary artery disease (25.3%),smoking (44.7%), hypothyroidism (25.2%) and Depression (24.8%) are some of the higher prevalent ones associated with MC. Concurrent IBS (2.4%), Celiac Disease (2.6%), Rheumatoid Arthritis (9.3%) and C.diff infection (4.5%) were noted among MC patients.
- Majority of the hospitalization were noted to be emergent(86.7%) and primary insurance in majority of the hospitalized was found to be Medicare (74.5%).

TABLES

Table 1. Baseline characteristics of Microscopic Colitis.

Variables	N = 35,685
Age, in years (Mean ± SD*)	71.2 ± 13.7
Age groups, %	
18 - 34 years	1.9%
35 – 49 years	5.9%
50 – 64 years	18.3%
65 - 79	43.3%
>79 years	30.4%
Gender, %	
Male	22.6%
Female	77.4%
Race, %	
Caucasians	89.6%
African Americans	2.5%
Others	7.9%
Comorbidities, %	
Hypertension	62.8%
Diabetes mellitus	18.7%
Congestive heart failure	18.4%
CAD*	25.3%
Peripheral vascular disease	9.3%
COPD*	25.1%
Renal failure	19.8%
Coagulopathy	6.1%
Obesity	9.9%
Drug abuse	2.1%
Alcohol abuse	4.1%
Smoking	44.7%
C.diff * infection	4.5%
IBS*	2.4%
Celiac disease	2.6%
Rheumatoid arthritis/collagen vascular disease	9.3%
Hypothyroidism	25.2%
Depression	24.8%
Admission Type, %	
Emergent	86.7%
Elective	13.3%
Insurance type, %	
Medicare	74.5%
Medicaid	4.7%
Private	18.4%
Other	2.4%

Figure: Microscopic Colitis Trend

CONCLUSION

Our study showed increasing prevalence of MC among the elderly, Caucasians and females throughout the study period. Study also showed increased association between depression and MC. Throughout the years MC has shown an increasing hospitalization trend which potentially increases healthcare cost burden. More detailed studies are warranted in this field to better understand pathophysiology, immune response, gut microbiome along with disease management to improve quality of life among MC patients and decrease the health care cost burden especially on Medicare.