



Background

- Incidence of inflammatory bowel disease (IBD) decreases after the second incidence peak of patients aged 50-70 years.
- Patients over 80 years represent 10% of the IBD patient population. Disease course for elderly patients in both ulcerative colitis (UC) and Crohn's disease (CD) has been noted to be milder, with less bleeding, less progression to penetrating disease and less occurrence of extraintestinal manifestations.
- Inpatient outcomes in this patient cohort have not yet been thoroughly explored.

Objective

- The aim of this study was to examine inpatient outcomes in octogenarian patients admitted for IBD using a national database.

Methods

- Retrospective, observational study using the National Inpatient Sample (NIS) 2018.
- All patients with principal ICD10CM codes for IBD were included.
- The cohort was divided into two age groups: >80 years old and < 80 years old.
- The cohort was further substratified into UC and CD.
- Primary outcome was determining the occurrence and odds of admission for IBD in octogenarian patients compared to patients younger than 80 years.
- Secondary outcomes included inpatient morbidity, mortality, colectomy odds, hospital length of stay (LOS), and total hospital costs and charges.
- Multivariate regression analyses were used to adjust for confounding variables.

Results

- A total of 99,530 patient admissions for IBD were included in the study (39% UC).
- Of these, 4,245 (4.27%) were >80y/o (63% UC). The mean age in the octogenarian cohort was 84.7 years and 68% were female.
- A greater proportion of Caucasian octogenarians were noted compared to the cohort younger than 80 years (84.55% vs 71.54%, respectively).
- Octogenarian patients with IBD were noted to have lower odds of admission (aOR:0.32, p< 0.01), compared to non-octogenarian patients with IBD.
- Octogenarian patients with IBD displayed lower odds of colectomy, while octogenarian patients with CD had lower odds of ICU admission compared to non-octogenarian patients.
- There were no differences in resource utilization noted between the two cohorts (Table 1).

Conclusions

- Octogenarians admitted for IBD primarily had a diagnosis of UC and 68% were female.
- As suggested by prior studies noting a lesser disease severity in this age group, octogenarians displayed decreased odds of admission for IBD, as well as decreased odds of ICU admission compared to non-octogenarian patients with IBD.
- Future studies should focus on directly assessing disease severity in this patient cohort to better understand its relationship with inpatient outcomes.

Table 1

	Adjusted Odds Ratio	95% Confidence Interval	p-value
IBD Admission	0.32	0.30-0.35	< 0.01
Crohn's Disease	0.20	0.18-0.23	< 0.01
Ulcerative Colitis	0.47	0.43-0.52	< 0.01
Mortality	0.75	0.34-1.68	0.49
Crohn's Disease	0.43	0.11-1.71	0.23
Ulcerative Colitis	1.21	0.42-3.49	0.72
Shock	0.55	0.29-1.03	0.06
Crohn's Disease	0.39	0.14-1.12	0.08
Ulcerative Colitis	0.74	0.33-1.68	0.47
AKI	0.84	0.68-1.05	0.13
Crohn's Disease	0.54	0.60-1.16	0.29
Ulcerative Colitis	0.88	0.65-1.18	0.38
ICU	0.43	0.23-0.80	< 0.01
Crohn's Disease	0.41	0.17-0.98	0.05
Ulcerative Colitis	0.50	0.51-1.22	0.13
SIRS	0.68	0.33-1.39	0.29
Crohn's Disease	0.19	0.02-1.43	0.11
Ulcerative Colitis	1.01	0.45-2.30	0.98
Multiorgan Failure	0.89	0.72-1.10	0.30
Crohn's Disease	0.79	0.57-1.10	0.16
Ulcerative Colitis	1.01	0.76-1.33	0.96
Colectomy	0.30	0.18-0.48	< 0.01
Crohn's Disease	0.08	0.02-0.34	< 0.01
Ulcerative Colitis	0.42	0.24-0.73	< 0.01
	Non-Octogenarians	Octogenarians	p-value
Mean Costs (USD\$)	\$12,153	\$11,329	0.94
Crohn's Disease	\$11,731	\$10,496	0.44
Ulcerative Colitis	\$12,849	\$11,814	0.64
Mean Charges (USD\$)	\$49,549	\$48,446	0.63
Crohn's Disease	\$47,617	\$45,901	0.58
Ulcerative Colitis	\$52,734	\$49,927	0.76
Mean LOS (days)	5.0	5.6	0.13
Crohn's Disease	4.9	5.3	0.73
Ulcerative Colitis	5.1	5.8	0.09

Table 1 – Adjusted Odds Ratios and Means for Octogenarian Patients with IBD Compared to Non-Octogenarian Patients with IBD.