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INTRODUCTION

- Hereditary hemochromatosis (HH) is a disorder of increased intestinal iron absorption leading to total body iron overload.
- Although it is among the most common genetic diseases globally, no large-scale nationwide data is available regarding HH-related hospitalizations in the United States.
- Our study aimed to find on a national level the demographics of the patients with HH, inpatient mortality, and resource utilization using the national inpatient database (NIS).

METHODS

- We queried the nationwide inpatient (NIS) 2016-2019 databases using the ICD-10 CM codes to identify all the patients hospitalized with hereditary hemochromatosis.
- We excluded patients under 18 years.
- The primary outcome of our study was to do an exploratory analysis and determine the baseline demographic characteristics of patients admitted with HH.
- The secondary outcomes included in-hospital mortality, length of stay (LOS), hospitalization cost, and outcomes.

Table: Baseline patient and hospital characteristics and outcomes for HH-related hospitalizations

Patient Characteristics	Hereditary Hemochromatosis (HH)		
No. of patients	196		
Male (%)	109(55.7%)		
Mean age, (SD) years	59.38		
Race [N, %]			
Caucasian	190(97.04%)		
African American	0		
Hispanic	0		
Asian	6(2.96%)		
Charlson Comorbidity Index Score [N, %]			
0	56(28.71%)		
1	47(24.07%)		
2	19(9.56%)		
3 or more	74(37.63%)		
Median Income (Zip Codes) [N, %]			
\$1-\$38,999	25(12.97%)		
\$39,000-\$47,999	48(24.29%)		
\$48,000-\$62,999	38(19.17%)		
>\$ 63,000	85(43.54%)		
Insurance Provider [N, %]			
Medicare	93(47.28%)		
Medicaid	14(7.03%)		
Private	84(42.94%)		
Others	2.70%		
Hospital Characteristics			
Hospital teaching Status [N, %]			
Non-Teaching	94(48.05%)		
Teaching	102(51.94%)		
Hospital Bed Size [N, %]			
Small	35(17.79%)		
Medium	63(32.07%)		
Large	98.2(50.12%)		
Hospital Location [N, %]			
Rural	4(1.8%)		
Urban	192(98.11%)		
Outcomes	HH	HH & Hep C	HH & ALD
Mortality, no. %	10 (0.5%)	10(50%)	0
Length of Stay (SD)	6	5.9	7.5
Hospitalization cost (SD)	\$21,763	\$38,161	\$43,962

RESULTS

- A total of 196 adult patients with HH were admitted in the United States with a mean age of 59.3 years.
- The majority of the patients were males (55%) and Caucasians (97.2%).
- The mean length of stay was 6 days, and a total of 10 patients (0.5%) died in the hospital.
- Medicare (47.2%) was the most common insurance, and most of the patients were admitted to large tertiary care hospitals.
- Patients with concomitant Alcoholic Liver Disease (ALD) had greater LOS (7.5 days vs. 6 days) than patients without ALD.

CONCLUSION

- Our study demonstrated that most of the patients admitted with HH are Caucasians and males.
- The mean LOS is 6 days.
- The total mean cost of hospitalizations is \$21,763.
- The HH patients with concomitant Hepatitis C and Alcoholic Liver Disease have higher healthcare utilization and worse outcomes than other patients.
- So, we propose patients with HH should be screened for Hepatitis C and alcoholic Liver disease to improve the outcomes for these patients.