Outcomes of Acute Exacerbation of COPD in Patients With NASH Compared With Non-NASH Patients: National Inpatient Database Analysis

PRESENTER:
Ansu Karki

BACKGROUND:

This study is to compare and evaluate the outcome of Acute Exacerbation of COPD in patients with NASH compared to non-NASH population.

METHODS

- We used the 2018 National Inpatient Sample (NIS)
- ICD-10 codes
- The primary outcome was odds of mortality
- Secondary outcome was mean length of stay.
- We also assessed the disposition based on NASH/non-NASH status on discharge.

RESULTS

- Using univariate regression analysis, we found that the unadjusted mortality was higher in patients with NASH compared to the non-NASH patients and was statistically significant [Odds ratio (OR) 1.47, 95% CI (1.02 – 2.13), p-value = 0.03].
- After adjusting for variables using multivariate regression analysis revealed a similar result with increased odds of mortality among NASH patients compared to non-NASH patients and was statistically significant [OR 1.52 95% CI (1.03-2.23), p-value = 0.031].
- The mean length of stay was longer for patients in NASH group compared to non-NASH group, however after adjusting using multivariate regression analysis, it wasn't statistically significant (OR 1.4, CI:0.34 – 5.65; p-value: 0.63).

Increased _**mortality**_ among patients with NASH presenting for Acute Exacerbation of COPD compared to patients with non-NASH.
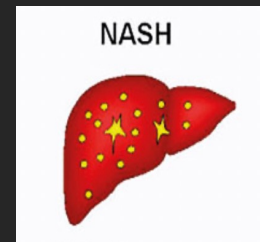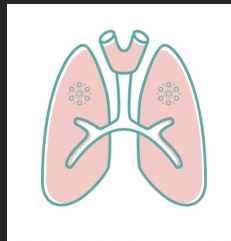
- The disposition of discharge was near evenly distributed among different groups.

	AE of COPD with NASH	AE of COPD without NASH
Age group (Years)	66.8	70.3
Female sex (%)	67.9	52.7
Obesity (%)	43.2	20.8
Smoking	27.2	35.3
Pulmonary Embolism (%)	0.2	1.7
Death (%)	7.4	5.1

CONCLUSION

Our study showed increased mortality among patients with NASH presenting for AE of COPD compared to patients with non-NASH. This was also associated with increased hospital cost without statistically significant longer length of stay. Further studies would be needed to assess the burden of disease on COPD patients and the subsequent outcome.

Ansu Karki, MD; Samir Jha, MD; Uchit Thapa, MD