

GASTROINTESTINAL BLEED IN PATIENTS WITH HISTORY OF MYELODYSPLASTIC SYNDROME - INPATIENT MORTALITY AND TEMPORAL ASSOCIATIONS

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Introduction: Patients with history of Myelodysplastic Syndrome (MDS) usually have cytopenias which theoretically predisposes them to bleeding events. In the past, cases of gastric ulcers among this population have been described. Studies dedicated to identify the risk factors associated with mortality in patients with MDS that present with gastrointestinal bleed (GIB) are lacking. In this study we aim to identify the mortality risk factors in this population.

Methods: We queried the National Inpatient Sample (NIS) database 2018 using the International Classification of Diseases, 10th revision, Clinical Modification (ICD-10-CM) coding system to identify the patients with a primary diagnosis of GIB and history of MDS. The primary outcome was mortality. Analysis was performed with STATA software. T test was used for continuous variables and chi square test was used for categorical variable. Logistic as well as multivariate regression was used to identify risk factors associated with mortality.

	Mortality in MDS patients with GI bleed (OR)					
	uOR	95% CI	P Value	aOR	95%CI	P Value
DM	1.12	1.03-1.21	0.005	1.03	0.78-0.91	<0.001
Obesity	0.61	0.54-0.69	<0.001	0.64	0.56-0.72	<0.001
Malnutrition	3.33	3.05-3.63	<0.001	2.9	2.73-3.25	<0.001
CHF	2.43	2.25-2.63	<0.001	2.2	2.00-2.45	<0.001
CAD	1.61	1.49-1.73	<0.001	1.2	1.13-1.35	<0.001
HTN	1.04	0.96-1.13	0.249	0.83	0.76-0.91	<0.001
Smoking	0.82	0.64-1.05	0.128	0.87	0.68-1.11	0.276
Female	0.78	0.72-0.84	<0.001	0.84	0.78-0.91	<0.001
Thrombocytopenia				2.42	2.18-1.67	<0.002
	Reference category: Female, No hypertension, No obesity, No smoker, No CHF, No DM, No CAD, no EGD.					

DISCUSSION

Comorbidities increased the mortality in the patients with MDS and GI bleed. Optimization of the preexisting comorbidities especially cardiac will greatly improve the outcomes. Malnutrition is also the major comorbidities and optimization of the nutritional status is warranted. Further studies with regards to cause of GI bleed is needed, so that the outcome can be improved

REFERENCES

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Results: 59,735 patients met the inclusion criteria. Among these, 2,568 (0.04%) patients presented with GIB to the hospital. 77% was upper GI bleed and 22% was lower GI Bleed. The mean age at admission was 79.2 and the LOS was 5.09 compared to those without GI bleed 6.24. The mean cost among the patients with bleed was 55K compared to 68K for the nonbleeding group. Patients with DM (OR 1.12, p0.005), malnutrition (OR 3.33, p <0.001), heart failure (OR 2.43, p<0.001), coronary artery disease (OR 1.61, p<0.001) and thrombocytopenia (OR2.8, p<0.001) had increased mortality compared to being female (OR 0.78, p <0.001) and being obese (OR 0.61, p <0.001). Total mortality was 0.03%. When adjusting for cofounders aOR remained similar for DM, malnutrition, heart failure, coronary artery disease and thrombocytopenia. HTN showed decreased likelihood of mortality with aOR of 0.83 and p<0.001.