

# Outcomes in patients with Cirrhosis undergoing Esophagogastroduodenoscopy for Upper GI Bleeding

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## BACKGROUND

- Variceal haemorrhage is the most common cause of upper gastrointestinal (UGI) bleeding in cirrhotic patients.
- Endoscopic variceal ligation (EVL), along with pharmacotherapy is the standard of therapy for treatment of bleeding gastroesophageal varices.
- Median re-bleeding rate in patients treated with EVL is about 32%.
- We studied the rate of re-bleeding and difference in outcomes in patients with UGI bleeding undergoing EVL compared to those that did not undergo EVL.

## METHODS

- We identified all patients with cirrhosis above 18 years of age undergoing esophagogastroduodenoscopy (EGD) for UGI bleeding over a three year period.
- Patient demographics, etiology of cirrhosis, rate of re-bleeding, rehospitalization and death at 60 days post discharge were studied in 54 patients with cirrhosis through retrospective chart review.
- Patients undergoing EVL were compared to those that did not undergo EVL.

## RESULTS

Endoscopic Variceal Ligation					Endoscopic Findings					
		EVL Performed	EVL not performed	P value						
Demographics	n (%)	33	21		Esophageal varices	21	25	0.04		
	Age (mean SD)	57.6 (12.8)	58.1 (12.6)	0.892		EV size >5mm	11 (84.6)	6 (21.4)	<0.001	
	Female	10 (30.3)	3 (14.3)	0.31		Gastric varices/Portal Hypertensive Gastropathy	12 (57.1)	18 (54.5)	1	
	Race						Gastritis	1 (4.8)	15 (45.5)	0.004
	Caucasian	7 (30.4)	8 (47.1)			Esophagitis	1 (4.8)	7 (21.2)	0.206	
	African-American	5 (21.7)	0 (0)			Gastric/Duodenal Ulcers	4 (19.0)	8 (24.2)	0.911	
Hispanic	8 (34.8)	4 (23.5)		Outcomes						
Asian	3 (13.0)	5 (29.4)		Rehospitalization	4 (19.0)	10 (31.2)	0.505			
Etiology of Cirrhosis					Cause of rehospitalization					
ALD		22 (66.7)	13 (61.9)	0.9	Re-bleeding	3 (75)	3 (30)			
HBV		2 (6.1)	1 (4.8)	1	Ascites	0	2 (20)			
HCV		10 (30.3)	5 (23.8)	0.835	Hepatic Encephalopathy	0	0			
NAFLD		2 (6.1)	2 (9.5)	1	Other	1 (25)	5 (50)			
Unknown Etiology		2 (6.1)	3 (14.3)	0.5	Death within 60 days	2 (14.3)	2 (7.7)	0.912		
MELD Na Score										
		17.0 (7.6)	16.6 (6.9)	0.831						
Indication for EGD										
	Hematemesis	5 (15.2)	9 (42.9)							
	Melena	3 (9.1)	3 (14.3)							
	Anemia	8 (24.2)	2 (9.5)							
	Other	17 (51.5)	7 (33.3)							

- 54 patients (table 1) underwent EGD for UGI bleeding. The most common presenting complaints were hematemesis and melena in 14 (25%) and 12 (22%) patients respectively.
- 17 patients (31%) had a history of variceal bleeding and ascites prior to current presentation. 17 patients (31%) were noted to have esophageal varices > 5mm in size on EGD.
- 16 patients (29%) had gastritis as a finding on EGD while gastric/duodenal ulcers and portosystemic gastropathy were identified in 12 patients (22%) and 30 patients (55%) respectively.
- 21 patients (38%) underwent EVL while 33 patients (61%) did not. 14 patients (25%) were re-hospitalized within 60 days, 4 patients (7.4%) among those re-hospitalized were managed with EVL. EGD findings and outcomes are outlined in table 2.

## CONCLUSIONS

- Our study showed that gastritis and peptic ulcer disease are a significant cause of UGI bleeding in cirrhotic patients.
- Prior studies have shown that PPI use may increase the risk of SBP and liver related mortality.<sup>1,2</sup>
- Since a significant cause of UGI bleeding in patients with cirrhosis may be peptic ulcer/gastritis related, future studies should focus on the length of PPI use after discharge in patients with cirrhosis who undergo EGD for UGI bleeding.

## REFERENCES

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