Measuring Hepatic Venous Pressure Gradient on Transjugular Liver Biopsy for Patients with Pre-cirrhotic Bridging Fibrosis: Effect of Portal Hypertension on Clinical Outcomes

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Introduction

Measuring hepatic venous pressure gradient (HVPG) during transjugular liver biopsy is important in evaluating the presence and severity of portal hypertension in patients with liver disease.

Our study compared clinical outcomes for patients with pathology proven pre-cirrhotic bridging fibrosis liver disease with and without elevated HVPG.

Methods

81 consecutive patients with pathology proven advanced pre-cirrhotic bridging fibrosis liver disease, HVPG measurement obtained during the same outpatient transjugular liver biopsy and sufficient clinical data of two years or greater from biopsy date were retrospectively reviewed between 2009 and 2017.

Primary endpoint included complications related to portal hypertension (any ascites or presence of varices on imaging or endoscopy).

Results

81 patients with liver bridging fibrosis (41F/40M, mean age of 55)

27 (33%) with normal HVPG (≤ 5 mmHg)

54 (67%) with elevated HVPG (> 5 mmHg)

Patients with Pre-cirrhotic Bridging Fibrosis			
	Normal HVPG (≤ 5 mmHg)	**Elevated HVPG (> 5 mmHg)**	
Characteristic	N = 27	N = 54	P value
Complications related to Portal Hypertension	9 (33%)	34 (63%)	.02
Ascites only	4	5	
Varices only	2	19	
Ascites and Varices	3	10	

Conclusions

Patients with pre-cirrhotic bridging fibrosis liver disease and elevated HVPG were associated with higher rates of complications from portal hypertension.

Measuring HVPG during transjugular liver biopsy provides additional prognostic value in patients with advanced pre-cirrhotic bridging fibrosis liver disease.

References

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