

## THE SPECTRUM OF ADVANCED LIVER DISEASE IN A TERTIARY CARE INSTITUTION

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### Purpose

In population based studies, the rise of HCV infection has surpassed alcoholic liver disease (ALD) as the most common cause of chronic liver disease. However, it is unknown if HCV is becoming the dominant cause of advanced liver disease. The aim of this study was to determine the distribution of etiologies in a cohort of patients presenting with advanced liver disease.

### Methods

A retrospective review of patients presenting with advanced liver disease defined as the presence of endoscopically identified esophageal or gastric varices for the period between January 1999 and December 2002. Etiologies of hepatic injury were identified from the clinical record and laboratory database. Patients were excluded if their disease could be attributed to more than one cause (i.e. alcohol and HCV) or had a non-hepatic cause of portal hypertension. Patients were grouped according to etiology: 1) HCV, 2) ALD, 3) hepatitis B (HBV), or 4) other (cryptogenic cirrhosis, non-alcoholic fatty liver disease, autoimmune hepatitis, portal vein thrombosis).

### Results

A total of 411 patients were identified as having either esophageal and/or gastric varices. The mean age was 56.1 years (range 19-89). There were 275 males (66.9%) and 136 females (33.1%). The proportions of females in those with HCV and ALD were similar although women were predominant in non-viral, non-alcohol related disease group compared to other diagnoses (59.4% vs. 24.3%,  $p < 0.0001$ ). Etiology of liver disease differed in those older than 65 years of age compared to younger patients for all diagnostic categories ( $p < 0.0001$ ) with ALD being more prevalent than HCV in older patients ( $p = 0.0120$ ). Race was evenly distributed amongst groups. Hepatitis C represented the single most common etiology (42.1%) followed by alcohol (29.9%), other predominantly non-viral, non-alcohol diagnoses (20.0%), and hepatitis B (8.0%).

### Conclusion

Etiology of liver disease drastically differs in those older than 65 years of age compared to younger patients. Higher prevalence of ALD rather than HCV in elderly population alludes to different risk behavior pattern between the two groups (i.e., intravenous drug use more common in younger patients). For patients younger than 65 years of age, HCV is the major cause of cirrhosis and burden of complications of cirrhosis attributable to HCV infection should be expected to rise as this population ages. ■