

## Assessment of endosonographic portal hypertension parameters in cirrhotic patients compared to non-cirrhotic patients: Across sectional study in 2018

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### Abstract

**Introduction:** Early diagnosis and treatment portal hypertension and varices can reduce the mortality of cirrhotic patient. The aim of this study was to assess portal hypertension parameters in cirrhotic patients by endosonography (EUS).

**Materials and Methods:** During 6 months, new cases of cirrhosis referred for variceal screening enrolled in this study. Patients who underwent EUS for CBD stone during the same period served as controls. We assessed the portal, splenic, and azygos veins diameter in both group. We determined the relationship between degrees of hepatic dysfunction in cirrhotic group to portal, splenic, and azygos veins diameter. Presence of esophageal and gastric varices in cirrhotic patient were assess and compared to conventional endoscopy. P-value<0.05 was considered statistically significant.

**Results:** During the study period, there were 17 patients (11male) with cirrhosis and 31 control subjects (11 males) enrolled. The mean ages of cases were 45.60±12 years and controls was 49±15 years. Patients with cirrhotic group had higher mean portal, splenic, and azygos vein diameters than control group but was not statistically significant. From 17 cirrhotic patients, 7 patients had esophageal varices during conventional endoscopy and 9 patients in EUS, also only one patient

had gastric varices in conventional endoscopy versus 7 patients by EUS, that was statistically significant (P-value=0.031).

**Conclusion:** EUS compared with conventional endoscopy allows for the collection of valuable data from the diagnosis of portal hypertension, esophageal and gastric varices.

**Key words:** Cirrhosis, Portal hypertension, Endosonography, Diagnosis