Results: The patients (virus 16, alcohol 6, virus+alcohol 2, nonalcoholic fatty liver 2, others 6) with F0-F1 were 8, F2 6, F3 5, F4 13. The measurement of LS was significantly increased with progression of fibrosis stage (F0-F1 7.05±1.98, F2 9.77±1.89, F3 16.92±0.93, F4 17.20±12.20, p=0.0019). Diagnostic accuracies of LS for prediction of significant and advanced fibrosis were 0.896 (95% CI, 0.736-0.974, p=0.0001) and 0.881 (95% CI, 0.717-0.967, p=0.0001). The cut-off values of LS for prediction of significant and advanced fibrosis were 10.44 kPa with 75.0% sensitivity and 100% specificity and 11.52 kPa with 72.2% sensitivity and 100% specificity, respectively.

Conclusions: In spite of limitation of pilot study, LS measured by SWE is correlated with the severity of liver fibrosis and is useful to predict significant and advanced fibrosis in patients with chronic liver diseases. However, this study is not analyzed according to causes and disease activities and well designed and prospective study is necessary.

Keyword: Elastography, Liver fibrosis, Liver stiffness

PE-041
Pharmacotherapy alone versus EVL combination for secondary prevention of esophageal varix bleeding: meta-analysis

Jeong Han Kim, So Young Kwon*, Soon Young Ko, Won Hyeok Choe, Chang Hong Lee
Department of Internal Medicine, Konkuk University School of Medicine, Seoul, Korea

Background: Endoscopic varical ligation (EVL) and non-selective beta blocker combination therapy is recommended for secondary prevention of esophageal varix bleeding by AASLD guideline. This is based on reports that combination is superior to EVL alone. However, there are little data for comparison between pharmacotherapy alone and combination for this purpose.

Methods: We searched Pubmed, EM-BASE and Cochrane central database, and selected randomized controlled trial (RCT) for comparison of pharmacotherapy alone versus combination therapy for secondary prevention of esophageal varix bleeding. Primary end point was overall rebleeding and mortality. Secondary end point was esophageal varical rebleeding. Cochran Q test was used for statistical heegoregany between trial and Mantel-Haenszel fixed-effect model was used for calculation of pooled relative risk (RR).

Results: There are four RCT for this topic [Garcia-Pagan et al. (Gut 2009), Lo et al. (J Gastroenterol Hepatol 2009), Ahmad et al. (J Parkistan 2009) and Vilanueva et al. (Aliment Pharmacol Ther 2009)]. Total 410 patients were analyzed (pharmacotherapy 204 vs. combination therapy 206). The used non-selective beta blockers for pharmacotherapy were nadolol or propranolol with isosorbide mononitrate (with or without prazocin according to HVPG monitoring, Vilanueva et al.). Overall rebleeding rate was lower in combination group but not significant (RR 0.78, p=0.093). Mortality was higher in combination group (RR 1.212, p=0.227). Esophageal varical rebleeding was significantly less common in combination group (RR 0.603, p=0.01).

Conclusions: Combination therapy is superior to pharmacotherapy alone for reduction of esophageal varical rebleeding. However, overall rebleeding rate was not significantly lower, and mortality was higher in combination therapy. More investigation is required for secondary prevention, especially in the era of new pharmacotherapy such as alpha blocker with HVPG monitoring.

Keyword: Esophageal varix, Varix bleeding, Prevention

PE-042
A case of portal vein obliteration manifested by recurrent upper gastrointestinal bleeding

Hyuk Soo Eun, Heon Young Lee*, Beom Hee Kim, Beom Yong Yoon, Min Jung Kim, Hye Jin Kim, Hee Seok Moon, Eaum Seok Lee, Seok Hyun Kim, and Byung Seok Lee
Gastroenterology Division, Department of Internal Medicine, Chungnam National University, College of Medicine, Daejeon, Korea

Background: Portal vein obliteration has been reported in animal studies containing dogs, mainly, but rarely of men. Portal vein obliteration is an inborn error. With a paucity in the presence of portal veins, it results in hepatic arterial blood flow increase for maintaining hepatic sinusoidial blood flow. This leads to sinusoidal hypertension and hepatic venous dilatation, which develops porto-systemic shunt in order to transport some of the blood to the central vein through by-passing the sinusoidal hepatocytes. These serial events result in abnormal hepatic parenchymal perfusion and lack of normal trophic factors, which causes liver cirrhosis and portal hypertension related symptoms.

Case: Our patient is a healthy 49 year-old asian male who has had no cause of liver cirrhosis, with a past medical history of aplastic anemia treated in September, 1993, with oxymetholone for 1 year and ulcerative proctitis treated in December, 1993. He complained of dull epigastric pain and recurrent upper gastrointestinal variceal bleeding. We treated him with endoscopic varical ligation therapy immediately and found that he had portal vein obliteration after a full investigation. We performed prophylactic endoscopic varical ligation therapy three times after outpatient follow-up. Until now, he lacked complications and symptoms related to portal hypertension. He has continuously improved gastroesophageal varices on endoscopic, radiologic studies and has had no further problems with bleeding due to beta blockers(propranolol 40 mg) and diuretics (spironoactone 25 mg).

Conclusions: In this rare case of portal vein obliteration, as other studies suggest, patients should undergo regular screening for liver cirrhosis. Furthermore, possibilities of benign or malignant neoplasm of the liver must be taken into consideration.

Keyword: Portal vein, Obliteration

PE-043
Validation of correlation of adjusted blood requirement index with acute varical bleeding control failure