

The effect of primary prophylaxis therapy for large esophageal varices in patients with hepatocellular carcinoma

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INTRODUCTION

Whether or not primary prophylaxis therapy could improve the prognosis of patients with hepatocellular carcinoma (HCC) and with high risk esophageal varices (EVs) is not fully elucidated.

METHOD

We retrospectively enrolled 1157 HCC patients who received an esophagogastroduodenoscopy at the time of HCC diagnosis in Taipei Veterans General Hospital from October 2007 to May 2014. Among them, 352 patients had large EV (F2 and/or F3) indicated for primary prevention. A total of 127 patients received primary prevention therapy (37 patients received non-selective beta-blocker and 90 patients received endoscopic variceal ligation, respectively) and the remaining 225 patients did not receive primary prevention. Prognostic factors were analyzed in terms of overall survival and variceal bleeding-free survival.

RESULTS

During a median follow-up of 8.7 months (IQR 2.8-30.9 months), 299 patient dead and the remaining 53 patients alive at their last visit. The cumulative 1-, 3-year overall survival rates were 52.8% vs. 36.2% and 31.5% vs. 20.4%, respectively ($p=0.019$). The cumulative 1-, 3-year bleeding-free survival rates were 86.6% vs. 64.6% and 82.7% vs. 59.6%, respectively ($p<0.001$). The rates of overall mortality and variceal bleeding were significantly lower in primary prevention cohorts than in cohorts without primary prevention. Multivariate analysis disclosed that serum bilirubin levels >1.6 mg/dL (Hazard ratio HR 1.681, 95% confidence interval CI 1.317-2.145, $p<0.001$), AST >40 U/L (HR 1.451, 95% CI 1.048-2.008, $p=0.023$), presence of ascites (HR 1.964, 95% CI 1.488-2.591, $p<0.001$), serum AFP level >20 ng/ml (HR 1.682, 95% CI 1.228-2.304, $p=0.001$), tumor size >3 cm (HR 2.000, 95% CI 1.462 2.734, $p<0.001$) and portal vein invasion (HR 2.491, 95% CI 1.852 3.351, $p<0.001$), without primary Prevention (HR 1.368, 95% CI 1.037-1.804, $p=0.027$) predicted 3-year overall mortality.

