LV-PP-2-1

Evaluation of FIB-4 and APRI in predicting the prognosis of hepatocellular carcinoma patients after hepatic resection

Sang Oh YUN¹, Jong Man KIM^{*2}

¹Department of Surgery, Korean Armed Forces Capital Hospital, Seongnam, Korea

²Department of Surgery, Samsung Medical Center, Seoul, Korea

Introduction: For the APRI and FIB-4 index, which are one of the non-invasive methods of examining the degree of liver fibrosis, our paper aims to examine the implications for predicting the prognosis in hepatocellular carcinoma patients undergoing hepatectomy.

Methods: Between 2006 and 2013, total 973 patients were underwent hepatic resection due to hepatocellular carcinoma and 871 patients were enrolled in our study after adjusting exclusion criteria. Statistics were performed by calculating the optimal cut off values for the recurrence free survival and overall survival of each group which are categorized by etiology and multivariate analysis were performed for evaluating the performance of index.

Results: Among the causes of HCC patients, HBV (n = 629, 72%) was the most common, and men were dominant in all groups. In each group divided by etiology, the area under the receiver operating characteristics of APRI and FIB-4 for recurrence free survival and overall survival were relatively higher in HCV patients than in other groups. After setting the cut-off value through the Youden index, univariate analysis and multivariate analysis for RFS and OS of all groups were performed, and the results of APRI values for RFS in each group were statistically significant (HBV : OR = 1.849, $p = 0.001$; HCV : OR = 6.548, $p = 0.010$; Alcohol : OR = 3.393, $p = 0.004$)

Conclusions: The significance of this study is that these simple laboratory findings are meaningful in revealing the prognosis of HCC patients, which can be predicted accurately only after the pathologic staging after surgery.

Corresponding Author: Jong Man KIM (yjongman21@gmail.com)

Presenter: Sang Oh YUN (adamys07@gmail.com)

Copyright © The Korean Association of Hepato-Biliary-Pancreatic Surgery

This is an Open Access article distributed under the terms of the Creative Commons Attribution Non-Commercial License (<http://creativecommons.org/licenses/by-nc/4.0>) which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.