EP-10

Prediction of post-resection prognosis with ADV score for huge hepatocellular carcinoma ≥ 13 cm

Shin HWANG*, Ki-Hun KIM, Deok-Bog MOON, Chul-Soo AHN, Tae-Yong HA, Gi-Won SONG, Dong-Hwan JUNG, Gil-Chun PARK

Department of Surgery, Asan Medical Center, University of Ulsan College of Medicine, Seoul, Korea

Introduction: Multiplication of α -fetoprotein, des- γ -carboxy prothrombin and tumor volume (ADV score) is a surrogate marker for post-resection prognosis of hepatocellular carcinoma (HCC). The objective of this study was to validate the predictive power of ADV score-based prognostic prediction model for patients with solitary huge HCC.

Methods: Of 3,018 patients, 100 patients who underwent hepatic resection for solitary HCC ≥ 13 cm during the study period between 2008 and 2012 were selected.

Results: Median tumor diameter and tumor volume were 15.0 cm and 886 mL, respectively. Tumor recurrence and overall survival (OS) rates were 70.7% and 66.0% at 1 year, and 84.9% and 34.0% at 5 years, respectively. Microvascular invasion was the only independent risk factor for disease-free survival (DFS) and OS. DFS and OS stratified by ADV score with 1log intervals showed significant prognostic contrasts ($p = 0.007$ and $p = 0.017$, respectively). DFS and OS stratified by ADV score with a cutoff of 8log showed significant prognostic contrasts ($p = 0.014$ and $p = 0.042$, respectively). Combination of MVI and ADV score with a cutoff of 8log also showed significant prognostic contrasts in DFS ($p < 0.001$) and OS ($p = 0.001$) according to the number of risk factors.

Conclusions: The prognostic prediction model with ADV score with or without combination of MVI could reliably predict the risk of tumor recurrence and long-term patient survival outcomes in patients with solitary huge HCCs ≥ 13 cm. Results of this study suggest that our prognostic prediction models can be used to guide surgical treatment and post-resection follow-up for patients with huge HCCs.

Corresponding Author: Shin HWANG (shwang@amc.seoul.kr)

Presenter: Shin HWANG (shwang@amc.seoul.kr)

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.