EP-159

A systemic inflammation response index (SIRI) correlates with survival and predicts oncological outcome in resected pancreatic cancer following neo-adjuvant chemotherapy

Ji Su KIM^{1,2}, Chang Moo KANG^{*1,2}

¹Department of Hepatobiliary and Pancreatic Surgery, Yonsei University College of Medicine, Seoul, Korea

²Pancreatic Cancer Center, Yonsei Cancer Center, Severance Hospital, Seoul, Korea

Introduction: The systemic inflammation response index (SIRI, neutrophil x monocyte/lymphocyte) is emerged in predicting oncological prognosis in various type of cancer. We investigated to examine whether SIRI is significant as a prognostic factor even in neo-adjuvant settings, and whether changes in SIRI values after neo-adjuvant chemotherapy are related to prognosis.

Methods: Medical records were investigated retrospectively about patients underwent pancreatic surgery following neo-adjuvant chemotherapy for pancreatic cancer, from 2006 to 2019. All 160 patients were investigated. In order to find the meaningful SIRI values and their changes, values of division and as well SIRI pre-neoadjuvant and SIRI post-neoadjuvant were calculated. Among calculated SIRI values, statistically significant SIRI values were found using statistical techniques to determine the effect on the survival rate.

Results: The value of SIRI post-neoadjuvant < 0.8710 affected the prognosis of patients in the univariate* and multivariate analysis** (p -value* = 0.0317, p -value** = 0.0066). The value of Δ SIRI < 0.9516 affected the prognosis of patients in the univariate* and multivariate analysis** (p -value* = 0.0380, p -value** = 0.00462). In Kaplan-Meier curve, the disease free survival was significantly different between the group of SIRI post-neoadjuvant < 0.8710 and SIRI post-neoadjuvant $\geq$ 0.8710 (p = 0.0303). The overall survival was significantly different between the group of SIRI post-neoadjuvant/pre-neoadjuvant < 0.9516 and SIRI post-neoadjuvant/pre-neoadjuvant $\geq$ 0.9516 (p = 0.0368).

Conclusions: An SIRI can be used to predict the survival of patients with pancreatic cancer after pancreatic resection following neo-adjuvant chemotherapy.

Corresponding Author: Chang Moo KANG (CMKANG@yuhs.ac)

Presenter: Ji Su KIM (kgc2608@yuhs.ac)

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.