Topic : Biliary & Pancreas

COMPREHENSIVE ANALYSIS OF CHYLE LEAK IN RESECTED PANCREATIC HEAD CANCER: IMPACT ON CLINICAL, ONCOLOGIC, AND NUTRITIONAL OUTCOMES

Jae Seung KWAK², Chang Moo KANG¹, Ho Kyoung HWANG¹, Sung Hyun KIM¹, Seung Soo HONG¹

¹ General Surgery, Severance Hospital, Yonsei University, Republic of Korea, ² General Surgery, Cheongyang-gun Medical Center, Republic of Korea

Background : Chyle leak (CL) is a relevant complication of pancreatic surgery, but data on its incidence, risk factors, clinical and oncologic impacts, and association with nutritional status remain inconsistent and limited.

Methods : We retrospectively reviewed patients who underwent pancreaticoduodenectomy for pancreatic head cancer from 2007 to 2023 at a single institution. The clinical impact of CL was evaluated by prolonged hospital stays and immune-nutritional status, assessed using the Controlling Nutritional Status (CONUT) score at discharge. Oncologic impact included the administration of adjuvant chemotherapy, the surgery-to-chemotherapy interval, overall survival (OS), and recurrence-free survival (RFS). Predictors of CL were identified through univariate and multivariate analyses.

Results : Among 508 patients, CL occurred in 70 (13.8%). CL was associated with prolonged hospital stay (OR: 1.947, P = 0.045) and poor immune-nutritional status at discharge (CONUT score > 6; OR: 1.820, P = 0.036). However, there was no significant difference in oncologic outcomes between CL and no CL group, including the administration of adjuvant chemotherapy (P = 0.732), the surgery-to-chemotherapy interval (P = 0.235), 5-year OS rate (P = 0.978), or 5-year RFS rate (P = 0.919). Predictors of CL included hypertension (OR: 2.054, P = 0.014), minimally invasive surgery (OR: 0.487, P = 0.031), longer operative time (OR: 0.743, P = 0.001), lymph node metastasis (OR: 1.844, P = 0.034), and delayed gastric emptying (OR: 0.146, P = 0.010).

Conclusions : CL significantly affects clinical outcomes by prolonging hospital stays and worsening nutritional status at discharge. However, it does not have a measurable impact on oncologic outcomes.

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