**Beyond Excellence Toward the Best! APRIL 5-6, 2019** Seoul, Korea

## BP OP 1-1

## Risk factor of delayed hepaticojejunostomy site stricture in pylorus preserving pancreaticoduodenectomy and its predicting nomogram

Seoung Yoon RHO, Ho Kyoung HWANG, Woo Jung LEE, Chang Moo KANG\*

Surgery, Yonsei University College of Medicine, Korea

**Introduction** : Incidence of anastomotic stricture after hepaticojejunostomy(HJ) in pylorus-preserving pancreaticoduodenectomy is about 4-10 % in benign disease, less common in malignancy such as pancreatic ductal adenocarcinoma. It is one of representative long-term complication, still it is not much investigated, such as risk factor for occurrence

**Methods** : From Jan 2012 to May 2018 , we investigated patients underwent hepaticojejunostomy during pancreaticoduodenectomy by single surgeon in Severance hospital. Patients who occurred HJ stricture confirmed by imaging studies, after 90 postoperative days, during follow-up period.

**Results** : Total 283 patients were included, and HJ stricture is confirmed in 27 patients(10.5%). Mean Body mass index in HJ stricture patients was slightly lower than NO HJ stricture patients (22.37 vs 23.41, p=0.071) with no statistical significances. However, proportion of postoperative bile leak is significantly higher in HJ stricture group (n=4, 14.81%) than NO HJ stricture group (n=9, 3.52%) (p=0.026). In multivariate COX regression , female (HR 0.39, 95% CI 0.16-0.96, p=0.039), bile duct size (HR 1.35, 95% CI 1.08-1.68, p=0.007), postoperative bile leak (HR 3.82, 95% CI 1.25-11.7, p=0.019) were most independent risk factor for HJ stricture. Based on this parameters, 3 year HJ stricture free probability was able to assumed with Harrell's concordance index of 0.7131 (95% CI 0.58-0.82).

**Conclusions** : Delayed occurrence of HJ stricture after pancreaticoduodenectomy is able to be predicted with powerful risk factors such as female, bile duct size, postoperative bile leak event. With this prediction nomogram, external validation in large cohort and various surgeon is mandatory in near future.

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