

**BP PP 2-2****Realistic advantages of early removal of surgical drain after
pancreatoduodenectomy: a single-institutional retrospective study**

So Jeong YOON, Sang Hyun SHIN*

Division of hepatobiliary-Pancreatic surgery, Department of Surgery, Samsung Medical Center, Sungkyunkwan University School of Medicine, Korea

Introduction : The latest guidelines from Enhanced Recovery After Surgery (ERAS®) Society stated that early removal of drain after pancreatoduodenectomy (PD) is beneficial in decreasing rates of complications including postoperative pancreatic fistula (POPF). This single-institutional study aims to ascertain actual benefits of early removal of surgical drain after PD.

Methods : The clinicopathological data of 450 patients who underwent PD between September 2018 and July 2020 were retrospectively reviewed. Surgical outcomes were compared between patients whose drains were removed within postoperative 3 days (early removal group) and after 5 days (late removal group). Logistic regression analysis was performed to identify risk factors of clinically relevant POPF (CR-POPF).

Results : There were 338 patients with drain fluid amylase (DFA) of less than 5000IU on the first day after surgery, consisting of 81 patients in early removal group and 257 patients in late removal group. In univariable comparisons, early removal group had fewer overall complications and shorter hospital stays than late removal group (30.9% vs 54.5%, $p<0.001$; 9.8 days vs 12.5 days, $p=0.030$, respectively). The incidence rates of specific complications including CR-POPF were comparable between the two groups. Multivariable analysis demonstrating factors affecting risk of CR-POPF showed that tumor of pancreas was a protective factor ($p=0.003$), but early removal of drain was not associated with increased risk of CR-POPF ($p=0.163$).

Conclusions : Although early removal of surgical drain after PD has not been identified as apparently beneficial, this study proved that it may contribute to early return to normal life without increasing complications including CR-POPF.

Corresponding Author. : **Sang Hyun SHIN** (surgeonssh@gmail.com)

Presenter : **So Jeong YOON** (wooyabi@gmail.com)