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## **Risk Factors of Postoperative Pancreatic Fistula after Pancreaticoduodenectomy: A Multicenter Cohort Study**

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**Introduction** : This study was designed to analyze the risk factors associated with postoperative pancreatic fistula (PF) using a large cohort registered in the Korean Tumor Registry System: Biliary-Pancreas (KOTUS-BP).

**Methods** : Sixty-two surgeons from 18 tertiary hospitals participated in the KOTUS-BP cohort. Patients who underwent pancreaticoduodenectomy for periampullary neoplasia were identified in the database. We analyzed the patients' characteristics, preoperative data, operation method, and postoperative outcomes including PF.

**Results** : Of the 4,846 patients, 179 patients with missing records of PF were excluded. A total of 4,667 patients were enrolled in this study. Postoperatively, 298 patients (6.4%) had experienced clinically relevant pancreatic fistula (CR-PF). In multivariate analysis, female sex, pancreatic cancer, and lymphovascular invasion were statistically significantly protective factor of CR-PF (p = 0.006, p < 0.001, p = 0.039, respectively). However, pylorus preservation was associated with CR-PF (p < 0.001).

**Conclusions** : The analysis of large-scale multicenter cohort data showed that female gender, pancreatic cancer, conventional pancreaticoduodenectomy, and lymphovascular invasion were associated with decreased CR-PF incidence.

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