

Type of connection procedure after pancreatic surgery influenced rate of pancreatic fistula

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After surgery to remove the head of the pancreas, invagination of the pancreas into the small intestine resulted in a lower rate of pancreatic fistula, according to researchers at the Jefferson Pancreas, Biliary and Related Cancer Center. The research was published in the *Journal of the American College of Surgeons*. It was performed as a randomized trial - the gold standard for studies.

Removing the head of the [pancreas](#), a procedure called pancreaticoduodenectomy (PD), is a common treatment for benign and malignant pancreatic diseases. Pancreatic fistula, a leakage of pancreatic secretions, represents healing failure of the pancreatic reconnection. It is a common complication of PD, affecting approximately 20 percent of patients. The development of pancreatic fistula has been associated with several factors, including soft pancreas texture and surgical technique. It can result in prolonged hospitalization and other complications.

Prior to this study, the role of the type of pancreas-intestine reconnection procedure, known as pancreaticojejunostomy (PJ), in the development of pancreatic fistula had not been as well-studied, according to Adam Berger, M.D., associate professor in the department of Surgery of Jefferson Medical College at Thomas Jefferson University.

"We actually hypothesized that a duct-to-mucosa PJ procedure would result in fewer pancreatic fistulas," Dr. Berger said. "However, the rate

of pancreatic fistula was almost double in patients who received the duct-to-mucosa PJ compared to the invagination PJ."

Dr. Berger and colleagues at Jefferson and Indiana University randomized 197 patients who were undergoing PD to receive either an invagination PJ or a duct-to-mucosa PJ. In the duct-to-mucosa cohort, the rate of pancreatic fistula was 24%. In the invagination cohort, the fistula rate was 12%. The greatest risk factor was pancreatic texture: 27% of patients with a soft gland developed pancreatic fistula, compared with 8% of patients with hard glands.

"There currently is no standard PJ performed after surgery, since the data have not indicated that one is better than the other for [patients](#)," Dr. Berger said. "These data suggest that invagination PJ may be the best choice."

Source: Thomas Jefferson University ([news](#) : [web](#))

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