Combination of fibrin glue protection with microsurgical technique for duct-to-mucosa pancreatico-jejunostomy reduces the incidence of leakages after pancreaticoduodenectomy.

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Abstract:

The Achilles' heel of pancreatic surgery is the management of the pancreatic stump. Leakage from pancreatic anastomosis with subsequent fistula, abscess formation, sepsis, or bleeding is one of the most common causes of morbidity and mortality, and it also contributes significantly to prolonged hospitalization and increased hospital expenses. Many surgical methods have been developed aimed at reducing the incidence of post-operative pancreatic fistula. However, the best technique for pancreatico-enteric reconstruction continues to be disputed. Herein, we describe an interim analysis of 35 consecutive pancreatico-duodenectomies, all with the same standardized technique that combines microsurgical technique for duct-to-mucosa pancreatico-jejunostomy with the routine use of fibrin sealant. The rate of leakage of pancreaticojejunostomy was 5,7% (n=2), all of which were grade A fistulas, treated conservatively. The increased precision of magnification instruments and microsurgical technique for duct to mucosa anastomosis, combined with routine sealing of the pancreatic anastomosis are key factors to efficiently manage the pancreatic stump. The good results obtained and especially the minimal rate of fistula suggests that this technical solution is a safe, feasible and reliable approach for pancreatic reconstruction after pancreatico-duodenectomy.