Fibrin sealants for the prevention of postoperative pancreatic fistula following pancreatic surgery (a cochrane review).

Authors: Cheng N., Xiong X., Peng S., Cheng Y.

Publication Date: 2014

Abstract:

Background: Postoperative pancreatic fistula is one of the most frequent and potentially

lifethreatening complications following pancreatic resections. Fibrin sealants are introduced to

reduce the incidence of pancreatic fistula by some surgeons. Methods: The Cochrane Library (Issue

10, 2012), Medline (1946 to October 2012), Embase (1980 to October 2012), Science Citation Index

Expanded (1976 to October 2012), and Chinese Biomedical Literature Database (1978 to October

2012) were searched to identify relevant randomized controlled trials. Two review authors identified

the trials for inclusion, collected the data, and assessed the risk of bias independently. Results:

Seven randomized controlled trials involving 700 patients were included in the review. None of the

trials were of low risk of bias. There were no significant differences in the incidence of overall

postoperative pancreatic fistula or the perioperative mortality between the two groups. The

proportion of postoperative pancreatic fistula that was clinically significant was not mentioned in

most trials. On inclusion of trials that clearly distinguished clinically significant fistulas, there was no

significant difference between the two groups. There were no significant differences in the overall

postoperative morbidity, reoperation rate, or hospital stay between the groups. Quality of life was not

reported in any of the trials. Conclusions: Fibrin sealants do not seem to prevent postoperative

pancreatic fistula following pancreatic resections. Based on the current available evidence, fibrin

sealants cannot be recommended for routine use in pancreatic surgery.