[Use of fibrin glue in the prevention of leakage in pancreatico-jejunal

anastomoses]. [Croatian]

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Abstract:

The aim of this study was to test the protective effects of fibrin sealing on

pancreatico-jejunostomy (PJA), the high-risk anastomosis following pancreas head resection.

Experimental study was performed on the mongrel dogs, divided in two groups (20 animals each):

Experimental group-with end to end "dunking" PJA, protected by temporary occlusion of the

pancreatic duct with fibrin sealant/Tissucol/Immuno Ag/, while control group was without any

protective procedure. The animals were followed 5 months in order to study: protective effects of

such procedure on the PJA quantified with the percent of anastomotic leakage, effects of the

exocrine secretion and effects the endocrine function Results: PJA leakage occurred in 13.33% in

control group. No leakage was registered in experimental group. Biochemical, histological and

electron microscopic study showed slight transitory elevation of amylase levels. Fibrin glue plug was

dissolved and pancreatic juice output was reestablished 12th days postoperatively. Long term

follow-up showed no damages of the endocrine and exocrine pancreas. Pancreatic duct occlusion

with fibrin glue appeared to be an useful method in the prevention of pancreatico-jejunostomy

leakage, without negative effects on the exocrine and endocrine pancreas.