Sutureless cholecystojejunostomy in pigs using an absorbable intraluminal stent and fibrin glue.

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Abstract:

The absence of foreign bodies in sutureless anastomoses provides faster healing. The first sutureless cholecystojejunostomies were reported by Murphy in 1892. The common bile duct was tied and 11 cholecystojejunostomies plus 12 jejunojejunostomies were performed in 12 Landrace pigs employing sliding absorbable intraluminal nontoxic stents (SAINTs) and fibrin glue. One cholecystojejunostomy was not performed owing to a gallbladder morphologic anomaly. Three animals died of problems unrelated to the SAINT-glue anastomoses. Of the 18 anastomoses in the 9 remaining animals, all were patent at the verification times of 14, 30, 120, and 480 days. Morphologically, there was greater edema and reduced height of the glandular epithelium in the 30-day CJs when compared to the jejunojejunal anastomoses. Results indicate that the sutureless SAINT-fibrin glue procedure is quite versatile and may be utilized for cholecystoenteric anastomoses.