

Robotic Pancreaticoduodenectomy With Biodegradable Ductal Stenting (Archimedes BPS®).

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Background : Postoperative Pancreatic Fistula (POPF) development remains a challenge after pancreaticoduodenectomy, occurring in 3–45% of cases. The placement of a trans-anastomotic Wirsung stent is usually done in high-risk patients to decrease incidence and severity of POPF.

Methods : Herein, we present a fully robotic pancreaticoduodenectomy with a biodegradable ductal stent interposition in a 47 y.o. female with a main duct IPMN of the pancreatic head and a fistula risk score of 6 (Moderate-risk).

Results : After gastrocolic ligament division and hepatic flexure and duodenum mobilization, the loco-regional lymphadenectomy was performed. Following gastric transection with endo-GIA, the bile duct and gastroduodenal artery have been divided, and the cholecystectomy performed. The neck of the pancreas has been transected, the jejunum divided with endo-GIA and mobilized from the Treitz ligament, and the uncinate process dissected from the mesenteric vessels. A Blumgart anastomosis has been performed between the soft-texture pancreatic stump and the jejunal loop with the interposition of a 6 Fr/60 mm long, medium degrading stent (20 days) in the 2 mm duct (Archimedes BPS®, AMG Int., Winsen-Germany). The hepatico-jejunostomy and gastro-jejunostomy have been performed distally on the same loop. Three abdominal drains have been positioned.

Conclusions : Surgery lasted 480 min, with 175 mls blood loss. The patient postoperatively developed a biochemical leak and was discharged home by day 12. She was readmitted a month later for an amylase-negative intra-abdominal abscess that was successfully treated with percutaneous drainage.

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