



Robotic Central Pancreatectomy for Well-Differentiated Neuroendocrine Tumor: Parenchymal-Sparing Procedure

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ABSTRACT

Background. The frequency of pancreatic neuroendocrine tumors (pNETs), representative of benign and borderline malignant pancreatic tumors, has been increasing. For pNETs, pancreas-preserving pancreatectomy can be an appropriate option. Conversely, some articles have recently shown that robotic central pancreatectomy (RCP) is feasible and safe.

Methods. We demonstrated our standardized technique of RCP. In our technique, pancreaticoenteric reconstruction is performed via a pancreaticogastrostomy to manage the distal pancreatic remnant. We also evaluated our initial experience with four consecutive RCPs for well-differentiated pNETs, retrospectively.

Results. In our evaluation, two men and two women had a median age of 45 years (range 36–64). Median tumor size was 2.1 cm (range 1–5), and median operative time was 315 min (range 268–630). No transfusion was given perioperatively. Median hospital stay was 17 days (range 13–22). Grade A postoperative pancreatic fistula was identified in two patients, while grade B was identified in the other two patients. One of the patients was managed

using an additional percutaneous drainage. No operative mortality was observed. Pathological findings confirmed R0 resection for all well-differentiated pNETs (pT1: two patients; pT2: two patients).

Conclusions. Central pancreatectomy can be carefully selected as a relevant surgical option for well-differentiated pNETs circumscribed in the pancreatic isthmus and body. Our robotic procedure might overcome the complexity of central pancreatectomy, a parenchymal-preserving procedure, with adequate oncological outcomes.

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