

### **Central pancreatectomy revisited**

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#### **ABSTRACT**

Central pancreatectomy (CP) is a parenchyma-sparing alternative resection to distal pancreatectomy, for benign and low malignant potential tumors located on the pancreatic isthmus and/ or body. Pancreatic metastases of other neoplasia might also benefit after a CP, in selected patients. Dagradi and Serio described the modern technique of CP, while Iacono introduced it in current clinical practice. An open CP represents the standard, but there is an emerging role for the minimally-invasive approach, which might become a standard for CP in experienced centers, particularly for the robotic approach. The rationale of a CP was to preserve the postoperative pancreatic functions because it implies the loss of a minimal amount of normal pancreatic tissue. However, the real clinical benefit of a CP is still controversial. High overall morbidity and pancreatic fistula rates were reported after a CP. However, most of the complications after a CP have been conservatively managed, with almost zero mortality. A CP has a minimal impact on the postoperative pancreatic functions; the diabetes mellitus rate after a CP is significantly lower, compared with the distal pancreatectomies. A proper selection of candidates for a CP is recommended. Thus, tumors located on the pancreatic isthmus are more likely to benefit after a CP, because the alternative surgical technique in these patients is an extended left pancreatectomy, a procedure with increased risk of postoperative pancreatic insufficiencies. Individual patient-related factors should be taken into consideration in the selection of the patients. Thus, a CP should be used in young patients, non-obese and without diabetes mellitus, with a good biological status, which might be able to overcome the potential postoperative complications. A CP can be safely incorporated into an experienced pancreatic surgeon armamentarium, albeit it represents an uncommon pancreatic resection.

**Abbreviations:** Central pancreatectomy (CP); Physiologic and Operative Severity Score for the enumeration of Mortality and Morbidity (POSSUM).

**Key words:** Central pancreatectomy; Parenchyma-sparing pancreatic resection; Benign/ low malignant pancreatic tumors; Pancreatic metastasis; Morbidity; Pancreatic fistula; Diabetes mellitus