

A Single Centre Experience in Minimally Invasive Surgery for Pancreatic Cystic Lesions

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Context Minimally invasive surgery is considered a safe and feasible procedure in selected patients with pancreatic tumors. **Objective** To present our short-term outcomes of laparoscopic and robotic surgery on pancreatic cystic lesions. **Methods** A retrospective analysis of hospital records was performed for patients who underwent minimally invasive surgery for suspected pancreatic cystic lesions from May 1999 to May 2013. We analyzed demographics, intraoperative and postoperative course, and pathological details. **Results** A total of 90 consecutive patients (mean age 42 years) was selected. Eighty-two patients (6 men) underwent laparoscopic distal pancreatectomy (DP) either spleen-preserving (SPDP) or not. Preservation of the spleen was successful in 26 patients over 29. Five women underwent robotic distal pancreatectomy (RDP), and in 3 an enucleation was performed. The median operative time was 140 minutes (range: 90-320 minutes) for DP, 240 minutes (range: 210-320 minutes) for RDP, and 85 minutes (range: 75-90 minutes) for enucleation. There was no conversion to open surgery. Two patients required blood transfusions during surgery. Mortality was

nil. Pathological examination revealed 3 mucinous cystadenocarcinomas, 36 mucinous cystadenomas, 28 serous cystadenomas, 14 solid pseudopapillary tumors, 3 IPMNs, 1 pancreatic pseudocyst, 1 adrenal pseudocyst, 1 acinar adenoma, 1 lymphangioma, 1 ciliated cyst, 1 simple cyst. The major morbidity rate was 13% and the minor morbidity rate was 31% (Clavien classification). Pancreatic fistulas developed in 27 patients (30%): 5 were classified as grade C, 6 as grade B, the others as grade A (ISGPF definition). A re-operation was required in 11 cases (12%), 4 due to post-operative hemorrhage, 5 due to sepsis from abdominal abscess, and 2 due to splenic infarction. In patients without complications, the median length of stay (LOS) was 7.5 days (range: 4-11 days); the ones with a complicated course had a median LOS of 11 days (range: 5-25 days). **Conclusions** This is the largest single centre series of laparoscopic surgery for cystic lesions in the English literature and confirms safety and feasibility. Robot assisted pancreatic resections is promising and deserves future larger application.