

Robotic Pancreatectomy for Pancreatic and Periapillary Cancer

**Nelide De Lio, Mario A Belluomini, Francesca Costa, Andrea Gennai,
Stefano Signori, Vittorio G Perrone, Fabio Vistoli, Ugo Boggi**

Division of General and Transplant Surgery, University of Pisa. Pisa, Italy

Context Minimally invasive surgery, when feasible, should accept no oncologic compromise in the setting of pancreatic and periapillary cancer since local radicality is key for all these tumor types. **Objective** We herein report on 50 patients undergoing robotic pancreatic resection because of pancreatic or periapillary cancer. **Methods** Fifty patients diagnosed with malignant tumors were selected for laparoscopic robot-assisted pancreatectomy between October 2008 to June 2012. There were 28 males (56%) and 22 females (44%), with a mean age of 60 years (range 24-78 years). Twenty-five patients underwent pancreaticoduodenectomy (PD) (50%), 16 distal pancreatectomy (DP) (32%), 7 total pancreatectomy (TP) (14%), and 2 to central pancreatectomy (CP) (4%). **Results** Final pathology disclosed neuroendocrine carcinoma (NEC) in 7 patients (14%), cancer arising on IPMN in 9 cases (18%), ductal adenocarcinoma (DA) in 19 cases (38%),

cholangiocarcinoma (CHC) in 5 patients (10%), carcinoma of the papilla of Vater in 5 cases (10%) (4 PD), solid pseudopapillary tumor in 2 (4%) and adenosquamous carcinoma in 1 case (2%). Resection margins were all negative. A mean number of 30 lymph nodes (range 5-74) was retrieved en-bloc with the specimen. 22 patients had lymph node metastasis (44%) including 11 diagnosed with DA (60%), 4 with CHC (80%) and 4 with NEC (5.7%). After a mean follow-up period of 14.1 months (range 1-42 months) all but 2 patients are disease-free (96%). **Conclusions** After a learning curve, best completed on patients with benign pancreatic diseases, laparoscopic robot-assisted pancreatic resection seems to offer the potential for radical tumor clearance in selected patients without locally advanced pancreatic and periapillary cancer. Further experience and longer follow-up are both needed before any final conclusion can be drawn.