Laparoscopic Left Pancreatectomy for Primary Pancreatic Adenocarcinoma

Riccardo Casadei\textsuperscript{1}, Marielda D'Ambrar, John Richardson\textsuperscript{2}, Claudio Ricci\textsuperscript{1}, Francesco Minni\textsuperscript{1}, Mohammed Abu Hilal\textsuperscript{2}

\textsuperscript{1}Department of Medical and Surgical Sciences (DIMEC), University of Bologna, S. Orsola-Malpighi Hospital. Bologna, Italy. \textsuperscript{2}Hepato-Biliary and Pancreatic Surgery, University Hospital Southampton NHS Foundation Trust. Southampton, UK

Context Laparoscopic left pancreatectomy has been shown to be feasible, safe and efficient technique for the treatment of benign and pre-malignant lesions of the left half side of the pancreas, but there is still controversy when it comes to the management of the malignant lesion of the pancreas. Objective To evaluate the feasibility, outcomes and oncological efficiency of the laparoscopic approach of primary pancreatic adenocarcinoma in two major tertiary centers. Methods Data from a prospectively updated databases of 105 patients operated between 2005 and 2013 was analyzed. Data included demographics, conversion rate, operative time, blood loss, length of hospital stay, postoperative complications according to Clavien-Dindo classification (score ≥3), mortality, lymph node retrieval and margin status. Results Fifteen patients (14.3%) underwent laparoscopic left pancreatectomy (LLP) for ductal adenocarcinoma; 7 patients were (46.7%) females and 8 (53.3%) males. The mean age of the patients was 62 years (range: 40-74 years). In three patients a multivisceral en bloc resection was accomplished (adrenalectomy: 2; mesocolonic resection: 3; and duodenojejunal flexure: 2). One patient was converted (6.6%). Mean operative time was 230 min, (range: 120-370 min). Mean blood loss was 228 mL (range: 50-900 mL). Average post-operative stay was 6 days (range: 2-17 days). Complication rate according to the classification of Clavien-Dindo (score ≥3) was 13.3% (2/15) and grade B/C postoperative pancreatic fistula rate was 20% (3/15). Average nodal rate was 14 (range: 3-41). R0 resection was achieved in 85.7% (12/14; in one patient R status is not yet available). Conclusion In expert centers, laparoscopic left pancreatectomy for primary pancreatic malignancy is feasible with excellent short term clinical and oncological results. However randomized studies are not yet available and are now seriously needed to shed light on future direction.