



Distal pancreatectomy with en-bloc celiac axis resection (DP-CAR) through retroperitoneal-first laparoscopic approach (Retlap): A novel strategy for achieving accurate evaluation of resectability and minimal invasiveness

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ABSTRACT

Background: Distal pancreatectomy with en-bloc celiac axis resection (DP-CAR) for borderline resectable pancreatic body cancer is increasingly being performed [1,2]. For survival benefits, obtaining margin-free resection (R0 resection) is crucial [3]. However, in patients with cancer abutting the root of the celiac axis and/or SMA, accurate resectability using preoperative imaging is difficult to judge [4]. Recently, we developed a novel strategy named “Retlap: Retroperitoneal-first laparoscopic approach” to achieve accurate evaluation of resectability and minimal invasiveness for difficult hepatopancreatobiliary malignancies and retroperitoneal tumors. Retlap enables direct evaluation of invasion of the roots of the celiac axis and SMA through the retroperitoneal approach.

Methods: This video demonstrates the case of a 50-year-old man with a 47 × 36-mm pancreatic body tumor after chemoradiotherapy. Preoperative computed tomography revealed tumor abutting on the roots of the celiac axis and SMA. Changes in the surrounding tissues due to chemoradiotherapy prevented accurate determination of the tumor invasion extent via preoperative imaging; thus, Retlap was applied. Retlap enabled us to identify and secure the roots of the celiac axis and SMA easily despite the advanced tumor. After confirming resectability, DP-CAR was performed.

Results: The operative time and estimated blood loss were 841 min and 572 mL. A negative surgical margin using Retlap was confirmed in frozen sections and R0 resection was achieved with uneventful postoperative course.

Conclusion: Retlap was technically feasible and useful for achieving accurate evaluation of resectability and minimal invasiveness for DP-CAR. Retlap can help provide optimal outcomes in locally advanced pancreatic cancer cases.

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Conflicts of interest

Drs. Gozo Kiguchi, Atsushi Sugioka, Masayuki Kojima, and Ichiro Uyama have no conflicts of interest or financial ties to disclose.

Author's contribution

GK conceived the idea for this new approach and performed the surgery. GK and AS wrote the manuscript. All authors read and approved the final manuscript.

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Abbreviations: Retlap, retroperitoneal-first laparoscopic approach; DP-CAR, distal pancreatectomy with en-bloc celiac axis resection; SMA, superior mesenteric artery

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Appendix A. Supplementary data

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