A New Surgical Technique of Pancreaticoduodenectomy with Splenic Artery Resection for Ductal Adenocarcinoma of the Pancreatic Head and/or Body Invading Splenic Artery: Impact of the Balance between Surgical Radicality and QOL to Avoid Total Pancreatectomy.

For pancreatic ductal adenocarcinoma (PDAC) of the head and/or body invading the splenic artery (SA), we developed a new surgical technique of proximal subtotal pancreatectomy with splenic artery and vein resection, so-called pancreaticoduodenectomy with splenic artery resection (PD-SAR). We retrospectively reviewed a total of 84 patients with curative intent pancreaticoduodenectomy (PD) for PDAC of the head and/or body. These 84 patients were classified into the two groups: conventional PD (n=66) and PD-SAR (n=18). Most patients were treated by preoperative chemoradiotherapy (CRT). Postoperative MDCT clearly demonstrated enhancement of the remnant pancreas at 1 and 6 months in all patients examined. Overall survival rates were very similar between PD and PD-SAR (3-year OS: 23.7% versus 23.1%, P=0.538), despite the fact that the tumor size and the percentages of UICC-T4 determined before treatment were higher in PD-SAR. Total daily insulin dose was significantly higher in PD-SAR than in PD at 1 month, while showing no significant differences between the two groups thereafter. PD-SAR with preoperative CRT seems to be promising surgical strategy for PDAC of head and/or body with invasion of the splenic artery, in regard to the balance between operative radicality and postoperative QOL.