



E-043

Efficacy And Safety Of Spleen-Preserving Distal Pancreatectomy With Artery Saving And Vein Sacrificing

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Background : Preserving splenic vessels during spleen-preserving distal pancreatectomy is challenging and time-consuming due to the need of meticulous dissection. Consequently, the Warshaw method has been introduced as a feasible alternative. However, splenic infarction could occur after ligating the splenic artery. This study introduces a Modified Warshaw method, which preserves the splenic artery while sacrificing the splenic vein, and compare it to the Warshaw method.

Methods : This multi-center retrospective study included patients with benign to borderline tumors located in the body or tail of the pancreas who underwent laparoscopic spleen-preserving distal pancreatectomy between November 2012 and February 2023. For bleeding during vessel dissection, either the Warshaw method (group W) or the Modified Warshaw method (group MW) was employed. Guided by preoperative imaging studies, if the splenic vein appeared to be embedded in the pancreatic parenchyma, the Modified Warshaw method was used before surgery, referred to as the planned Modified Warshaw method (group PMW).

Results : A total of 91 patients were analyzed (48 in group MW and 43 in group W). Group MW showed lower incidence of splenic infarction than group W (6.3% vs. 69.8%, $p < 0.001$). Group MW also exhibited a lower incidence of engorged gastric collaterals than group W (25.0% vs. 55.8%, $p = 0.003$). Among 48 patients in group MW, 16 were included in group PMW. Group PMW exhibited less estimated blood loss than group W (71.9 ± 59.13 cc vs. 357.9 ± 447.72 cc, $p = 0.006$). There were no significant differences in perioperative changes of splenic volume between groups MW and W.

Conclusions : The planned Modified Warshaw method is an efficient and safe procedure, resulting in lower estimated blood loss and more favorable outcomes regarding splenic infarction and gastric collaterals than the Warshaw method without causing congestive splenomegaly.

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