

E-014

## Implications Of PV/SMV Involvement In Pancreatic Cancer: Comprehensive Correlation From Preoperative Assessment To Pathological Invasion And Resection Margins, And Their Impact On Long-term Outcomes

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**Background** : The incidence of portal vein/superior mesenteric vein (PV/SMV) resection during pancreatoduodenectomy is increasing in clinical practice. This study investigated the clinical significance of preoperative PV/SMV assessment and intraoperative resection and their correlation with pathological results and long-term survival outcomes.

**Methods** : We analyzed 443 patients undergoing pancreatoduodenectomy at a tertiary center from 2012 to 2017 based on PV/SMV resection. Subgroup analyses were performed based on preoperative PV/SMV involvement, resection, and margin status.

**Results** : Total 441 patients were analyzed; 175 had PV/SMV involvement on preoperative radiological assessments and 128 underwent PV/SMV resection. True pathological invasion was observed in 78 patients (60.9%), with 34.3% showing no invasion or negative margins. The positive predictive value for preoperative PV/SMV involvement was 61.7%, with a false-negative value of 28.9%. Survival rates of patients who underwent PV/SMV resection were worse than those who did not (2-year survival rate: 38.1% vs. 54.9%, p<0.001). Patients without PV/SMV resection with an rR1/R1 margin showed no decrease in the 2-year survival rate compared to those with PV/SMV resection and R0 margins (54.9% vs. 40.3%, p=0.029). Prognostic factors included body mass index >23 kg/m2, hypertension, carbohydrate antigen 19-9 >150 U/mL, estimated blood loss >500 mL, PV/SMV resection, N stage, perineural invasion, and adjuvant treatment.

**Conclusions** : PV/SMV resection could ensure R0 resection but may lead to unnecessary resection. Careful consideration is essential in determining the need for PV/SMV resection. Poor survival in such patients highlights the need for tailored treatments, including neoadjuvant therapy, for those who are expected to undergo PV/SMV resections.

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