Topic : Biliary & Pancreas

CUT-SURFACE MARGIN (OMM RULE) STATUS IS STILL MEANING IN RESECTED PANCREATIC CANCER? : UPFRONT SURGERY VS NEOADJUVANT THERAPY

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Background : Pancreatic ductal adenocarcinoma remains one of the most lethal malignancies, with a 5-year survival rate of only 13%. Despite advances in chemotherapy and surgical techniques, high recurrence rates and poor prognosis persist. This study investigates the impact of cut-surface resection margin status on survival outcomes in patients undergoing upfront surgery versus those receiving neoadjuvant therapy.

Methods : A retrospective review was performed on 330 patients who underwent surgical resection for PDAC at Severance Hospital from 2015 to 2021. Patients were divided into two groups: upfront surgery (n = 185) and neoadjuvant therapy (n = 145). Kaplan-Meier survival analysis and Cox proportional hazards models were used to evaluate overall survival (OS) and recurrence-free survival (RFS).

Results : R1 resections were observed in 15% of upfront surgery patients and 17% of neoadjuvant therapy patients. In the upfront surgery group, there were no significant differences in OS (37 vs. 51 months, p = 0.863) or RFS (13 vs. 12 months, p = 0.829) between R0 and R1 resections. In contrast, in the neoadjuvant therapy group, R1 resections were associated with significantly worse OS (16 vs. 54 months, p< 0.001) and RFS (7 vs. 14 months, p< 0.001). Multivariable analysis identified R1 resection as an independent prognostic factor in the neoadjuvant group (HR: 2.147, p = 0.005) but not in the upfront surgery group.

Conclusions : The cut-surface resection margin status on survival varies by treatment strategy. R0 resection is crucial for improved outcomes in patients receiving neoadjuvant therapy, underscoring its importance in preoperative planning and surgical precision.

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