

PROGNOSTIC SIGNIFICANCE OF NUTRITIONAL CHANGES FROM BEFORE NEOADJUVANT CHEMOTHERAPY TO THREE MONTHS AFTER SURGERY IN PANCREATIC CANCER PATIENTS

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Background : Pancreatic cancer is highly aggressive, with poor survival rates despite multimodal treatments such as neoadjuvant chemotherapy (NAC) and curative surgery. Nutritional deterioration due to disease progression and treatment negatively affects prognosis. This study evaluates nutritional changes from before NAC to three months after surgery and their effect on survival outcomes.

Methods : A retrospective review of 141 pancreatic cancer patients undergoing curative surgery after NAC between 2010 and 2020 was conducted. Nutritional status was assessed using Controlled Nutritional Status (CONUT) scores before NAC and three months after surgery. Based on changes in CONUT scores between the two time points, patients were classified into three groups: worsened, maintained, and improved. Subsequently, differences in overall survival (OS), disease-free survival (DFS), and prognostic factors among the three groups were analyzed.

Results : The improved group had the highest median OS, followed by the maintained and worsened groups (66, 36, and 19 months, respectively; $p < 0.01$). Similar patterns were observed for DFS (39, 22, and 11 months, respectively; $p < 0.01$). Multivariate analysis identified nutritional deterioration as an independent unfavorable prognostic factor for OS (hazard ratio [95% confidence intervals], 1.8 [1.1-3.0]; $p < 0.01$).

Conclusions : Maintaining and improving nutritional status during NAC and early postoperative periods is critical to survival, especially during the first three months. Prehabilitation and postoperative interventions that include comprehensive and sustained nutritional support strategies are essential to improving survival outcomes for pancreatic cancer patients.

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