

E-010

Predicting Prognosis And Optimal Timing For Surgery Using CA 19-9 In Pancreatic Cancer Patients Who Underwent FOLFIRINOX-Based Neoadjuvant Therapy

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Background : Standard treatment for borderline resectable pancreatic cancer involves neoadjuvant therapy followed by surgical resection. This approach is extended to resectable pancreatic cancer cases. However, determining the optimal timing for surgery after neoadjuvant treatment is controversial. Therefore, we conducted analysis of the outcomes of patients undergoing pancreatic resection following neoadjuvant chemotherapy.

Methods : We retrospectively analyzed patients who underwent pancreatic surgery and were diagnosed with pancreatic ductal adenocarcinoma through histopathological reports from January 2018 to December 2021, at Samsung Medical Center. Patients were included who received FOLFIRINOX-based neoadjuvant treatment. The laboratory test results, including CA 19-9, available imaging data such as CT and PET CT, operative information, and postoperative data such as information on recurrence or death were collected for the analysis.

Results : Total 83 patients were included in this study. Pancreaticoduodenectomy was performed in 59 patients, distal pancreatectomy in 20 patients, and total pancreatectomy in 4 patients. After neoadjuvant treatment, 1 patient achieved complete remission (CR), 33 patients showed partial response (PR), 46 patients had stable disease (SD), and 3 patients experienced progressive disease (PD). The 3-year overall survival rate for the patients was 46.7%, and the disease-free survival rate was 22.6%. When analyzing overall survival and disease-free survival in the patient cohort, patients with initial CA 19-9 elevation (>37) who achieved normalization after neoadjuvant treatment showed a 3-year disease-free survival of 32.5%, whereas the other patients who did not achieve normalization had a 3-year disease-free survival of 0.0% (p=0.016). In patients with CA 19-9 elevation, comparing patients with a post-neoadjuvant therapy CA 19-9 reduction of 70% or more to those without reduction, the 3-year overall survival rates were 58.3% and 25.0%, respectively (p=0.002), and the 3-year disease-free survival rates were 22.6% and 0% (p=0.036).

Conclusions : In conclusion, whether to perform surgery and the timing of surgery after neoadjuvant treatment should be decided considering tumor size and CA 19-9 value.

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