

AB118. P093. Impact of neoadjuvant chemoradiotherapy using full-dose gemcitabine and concurrent radiation for resectable pancreatic cancer

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Background: Although much attention has been paid to neoadjuvant treatment for pancreatic cancer (PC), its efficacy remains to be established. In this study, we have retrospectively evaluated the impact of neoadjuvant chemoradiotherapy (NACRT) on perioperative and long-term clinical outcome in PC.

Methods: One hundred sixty patients who preoperatively received full-dose gemcitabine (1,000 mg/m²) with concurrent radiation of 54 Gy between 2006 and 2016 were analyzed. One hundred thirty patients who underwent upfront surgery were served as control.

Results: Among the 160 patients treated with NACRT, 153 patients (96%) completed the protocol treatment. The reasons of failure to complete NACRT were drug-induced pneumonia, acute mucosal injury, severe cholangitis and poor performance status (PS). Furthermore 21 (13%) couldn't undergo pancreatic resection after

NACRT because of distant metastasis in 9 patients, tumor progression in 7 and poor PS in 5. The rate of pancreatic fistula was lower and hospital stay was shorter in the NACRT group compared to the control group (P=0.033, P=0.002). Furthermore, the rate of lymph node metastasis, R0 resection and pathological stage were favorable in the NACRT group (P<0.0001, P=0.006, P<0.0001). The completion rate of adjuvant chemotherapy was also higher in the NACRT group (P=0.015). Importantly, patients treated with NACRT had a better prognosis than those without (median survival time: 60.2 *vs.* 28.5 months, P=0.008). In addition, according to tumor resectability status, patients were classified as R (resectable), BR-P (borderline resectable with venous involvement) and BR-A (borderline resectable with arterial involvement) groups. As a result, patients treated with NACRT had a better prognosis than those without in the R and BR-P groups (58.6 *vs.* 34.2 months, P=0.013; 62.4 *vs.* 18.8 months, P=0.015), while NACRT had no significant impact on prognosis in the BR-A group.

Conclusions: Neoadjuvant chemoradiotherapy may have a variety of favorable impact in pancreatic cancer treatment. Furthermore, NACRT may improve the prognosis especially in resectable and borderline resectable pancreatic cancer with venous involvement.

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