Adjuvant radiotherapy and chemoradiation with gemcitabine after R1 resection in patients with pancreatic adenocarcinoma.

The purpose of the study was to evaluate the effect of radiation therapy and chemoradiation with gemcitabine (GEM) after R1 resection in patients with pancreatic adenocarcinoma (PAC). We performed a retrospective analysis of 25 patients who were treated with postoperative radiotherapy (RT) or chemoradiation (CRT) after surgery with microscopically positive resection margins for primary pancreatic cancer (PAC). Median age was 60 years (range 34 to 74 years), and there were 17 male and 8 female patients. Fractionated RT was applied with a median dose of 49.6 Gy (range 36 to 54 Gy). Eight patients received additional intraoperative radiotherapy (IORT) with a median dose of 12 Gy. Median overall survival (mOS) of all treated patients was 22 months (95% confidence interval (CI) 7.9 to 36.1 months) after date of resection and 21.1 months (95% CI 7.6 to 34.6 months) after start of (C)RT. Median progression-free survival (mPFS) was 13.0 months (95% CI 0.93 to 25 months). Grading (G2 vs. G3, P = 0.005) and gender (female vs. male, P = 0.01) were significantly correlated with OS. There was a significant difference in mPFS between male and female patients (P = 0.008). A total of 11 from 25 patients experienced local tumour progression, and 19 patients were diagnosed with either...
We demonstrated that GEM-based CRT can be applied in analogy to neoadjuvant protocols in the adjuvant setting for PAC patients at high risk for disease recurrence after incomplete resection. Patients undergoing additive CRT have a rather good OS and PFS compared to historical control patient groups.