

Postoperative gemcitabine alone and concurrent with radiation therapy in locally advanced pancreatic carcinoma

Serdar Ozkok¹, Senem Demirci¹, Deniz Yalman¹, Murat Zeytinlu², Deniz Nart³, Yildiray Yuzer², Ahmet Coker², and Erdem Goker⁴

¹Department of Radiation Oncology, ²Department of General Surgery, and ³Department of Pathology, Ege University Faculty of Medicine, Izmir; ⁴Division of Medical Oncology, Tulay Aktas Oncology Hospital, Ege University Faculty of Medicine, Izmir, Turkey

ABSTRACT

Aims and background. To evaluate the treatment results of gemcitabine alone and concurrent with radiotherapy after R0/R1 resection of locally advanced pancreatic cancer.

Methods and study design. From 1999 to 2005, 55 patients with stage II resected pancreatic cancer treated with gemcitabine-based radiochemotherapy were retrospectively evaluated. Initially, one cycle of induction gemcitabine was administered and followed by weekly gemcitabine concurrent with radiotherapy. After the completion of radiochemotherapy, patients received 3 additional courses of gemcitabine.

Results. Thirteen patients were stage IIA and 42 were stage IIB. Forty-six patients (83.6%) had R0 and 9 patients (16.4%) had R1 resection. All of the patients received induction chemotherapy and radiotherapy, all but 3 received concurrent radiochemotherapy, and 46 (84%) patients received maintenance chemotherapy. During induction, concurrent and maintenance phases of the protocol, 11%, 13.5% and 19.5% of the patients had at least one \geq grade 3 toxicity, respectively. Within a median 47 months (range, 34-105) of follow-up, 4 (7.3%) patients had isolated local recurrence, 5 (9%) patients had local recurrence and distant metastases, and 27 (49%) had only distant metastases. Median disease-free survival and overall survival were 13 (range, 4-105) and 19 months (range, 6-105), respectively. In multivariate analysis, nodal stage, AJCC stage and number of lymph nodes dissected were the significant factors affecting disease-free survival whereas Karnofsky performance status was the only significant factor for overall survival.

Conclusions. The prognosis for pancreatic cancer remains poor despite adjuvant radiochemotherapy. More aggressive treatments should be considered in patients with unfavorable prognostic factors. Free full text available at www.tumorionline.it

Key words: gemcitabine, pancreatic cancer, postoperative radiochemotherapy, prognostic factors.

The study was presented in part at the 13th Meeting of the European Cancer Conference (ECCO), Paris, France, 30th October - 3rd November 2005.

Correspondence to: Senem Demirci, MD, Ege University School of Medicine, Department of Radiation Oncology, Bornova, Izmir, 35100, Turkey. Tel +90-232-390-4476; fax +90-232-388-4294; e-mail senem.demirci@ege.edu.tr

Received October 22, 2009; accepted March 26, 2010.