

## 切除不能局所進行膵癌に対する治療戦略 —とくに放射線化学療法の延命およびQOLに対する有用性について—

<sup>1</sup>新地洋之, <sup>2</sup>高尾尊身, <sup>1</sup>前村公成, <sup>1</sup>野間秀歳, <sup>1</sup>上野真一, <sup>1</sup>迫田雅彦, <sup>1</sup>久保文武,  
<sup>1</sup>夏越祥次, <sup>3</sup>平木嘉幸, <sup>3</sup>中條政敬, <sup>1</sup>愛甲 孝

<sup>1</sup>鹿児島大学腫瘍制御学・消化器外科, <sup>2</sup>鹿児島大学フロンティアサイエンス研究推進センター,  
<sup>3</sup>鹿児島大学放射線診断治療医学  
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## Length and Quality of Survival Following Chemo-radiation Therapy for Locally Advanced Unresectable Pancreatic Cancer

<sup>1</sup>Hiroyuki SHINCHI, <sup>2</sup>Sonshin TAKAO, <sup>1</sup>Kosei MAEMURA, <sup>1</sup>Hidetoshi NOMA, <sup>1</sup>Shinichi UENO,  
<sup>1</sup>Masahiko SAKODA, <sup>1</sup>Fumitake KUBO, <sup>1</sup>Shoji NATSUGOE, <sup>3</sup>Yoshiyuki HIRAKI, <sup>3</sup>Masayuki NAKAJO,  
and <sup>1</sup>Takashi AIKOU

<sup>1</sup>Department of Surgical Oncology and Digestive Surgery, <sup>2</sup>Frontier Science Research Center,  
and <sup>3</sup>Department of Radiology, Kagoshima University, Kagoshima, Japan

### Abstract

**Background and Purpose:** Pancreatic cancer is a morbid disease with a dismal prognosis particularly in cases of unresectable tumor. The purpose of this study was to evaluate whether external-beam radiotherapy (EBRT) with concurrent chemotherapy affects the length and quality of survival in patients with locally unresectable pancreatic cancer.

**Methods:** Fifty-eight patients with histologically proven locally advanced and unresectable pancreatic cancer without distant metastases were evaluated in this retrospective study. Twenty-seven patients received EBRT (50.4 Gy/28/fractions) with concurrent twice-weekly gemcitabine (40 mg/m<sup>2</sup>/day) (GEM+RT group), 16 patients received EBRT with concurrent continuous infusion 5-FU (200 mg/m<sup>2</sup>/day) (5-FU+RT group), and 15 patients received best supportive care only without chemoradiation therapy (BSC group), respectively. The length and quality of survival were analyzed and compared among the three groups.

**Results:** The median survival and 1-year survival rate of 13.2 months and 56% in the 5-FU+RT group and 12.8 months and 53% in the GEM+RT group was significantly better than the respective 6.4 months and 0% in the BSC group. 2-year and 3-year survival rate of 35% and 13% in the GEM+RT group was insignificant but better than that of 6% and 0% in the 5-FU+RT group (p=0.1). The average monthly Karnofsky score of 77 in the 5-FU+RT group and 75 in the GEM+RT group, a quality of life indicator, was significantly higher than the 65.5 in the BSC group. The number of hospital days per month of survival was significantly smaller in the chemoradiation group than in the BSC group.

**Conclusions:** External-beam radiotherapy with concurrent chemotherapy increased the length and quality of survival as compared to no chemoradiotherapy and provided a definite palliative benefit for patients with unresectable pancreatic cancer. Gemcitabine-based chemoradiation appears to show a further longer survival than 5-FU-based chemoradiation and provides a first-line treatment.

**Key words:** external-beam radiotherapy, continuous 5-FU infusion, gemcitabine, unresectable pancreatic cancer, length and quality of survival.

