

Oral Presentation V

V-1

Use of the New Ultrasonically Curved Shear in Pancreaticoduodenectomy for Peri-ampullary Cancer

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Objectives: To examine whether use of the new ultrasonically curved shear (UCS) can reduce the number of surgical stitches, extent of blood loss and operation time in (pylorus-preserving) pancreaticoduodenectomy (PD) for peri-ampullary cancer.

Methods: The study population comprised 26 consecutive patients who underwent PD for peri-ampullary cancer. Intra-operative data, including number of stitches used, was prospectively collected. Results from 13 patients who underwent conventional PD (Group A) were compared with those from 13 patients who underwent PD using UCS (Group B).

Results: There were no significant differences in baseline characteristics between the two groups. The extent of blood loss in Group B was significantly less than in Group A ($p < 0.0001$). Although there was no difference in total operation time, the time spent on hilar lymph node dissection in Group B patients was significantly shorter than in Group A patients ($p = 0.0189$). The number of surgical stitches used in Group B patients was significantly less than in Group A patients ($p < 0.0001$). There were no incidences of post-pancreatectomy hemorrhage.

Conclusion: Use of the new UCS was safe, and was associated with the economical benefit of less surgical stitches and reduced blood loss.

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Phase II Trial of Postoperative Adjuvant Gemcitabine and Cisplatin Chemotherapy Followed by Chemoradiation with Gemcitabine in Patients with Resected Pancreatic Cancer

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Background: Despite "potentially curative" resection for pancreatic carcinoma the 5-year survival in these patients is less than 20%. Progression of disease can occur both locally and in distant sites. Effective multi-modality adjuvant treatment protocol is needed for these patients receiving curative resection.

Methods: Patients with curatively resected pancreatic adenocarcinoma (stage IB ~ IIB, AJCC 6th ed.), ECOG PS of 0-2, and no prior chemo- or radiotherapy were eligible. Treatment consisted of chemotherapy with gemcitabine (GEM) 1,200 mg/m² (D1,8) and CDDP 60 mg/m² (D1) every 3 weeks for 2 cycles. Subsequently, patients without progression received chemoradiotherapy (CRT) (50.4 Gy/28 Fx) with concurrent weekly gemcitabine (300 mg/m²/week). GEM 1,200 mg/m² were given on day 1, 8 every 3 weeks for 4 cycles after CRT. The primary endpoint was to evaluate one year disease free survival (DFS) rate. The secondary endpoints were median DFS, overall survival (OS), and safety.

Results: From Oct. 2005 to Sep. 2009, we enrolled 74 patients with curatively resected pancreas cancer (median age 61, M:F = 48:26). The median follow up duration was 45 months (range 10.2 ~ 64.6 months).

Out of 74 patients, six patients withdrew consent, 11 patients confirmed disease progression during treatment and 57 patients completed CRT followed by systemic chemotherapy. One-year DFS rate was 62.1%. Fifty-two patients (70.3%) were diagnosed with recurrence. Most of the recurrences were systemic disease (49 patients, 66.2% of all patients). Median DFS was 17.4 months and median OS was 33.6 months in all patients. The stage (73.3% in IIA, 55.6% in IIB, $p < 0.001$) and the nodal status (71.0% in N0, 55.6% in N1, $p = 0.01$) at the time of diagnosis were significantly related with DFS. Toxicities were generally tolerable, 53 events of grade 3 or 4 hematologic toxicity were reported and four patients experienced febrile neutropenia.

Conclusions: Adjuvant GEM-CDDP chemotherapy followed by GEM-RT and maintenance GEM showed promising efficacy and good tolerability in curatively resected pancreatic cancer.

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Long-term Results of Surgical Resection Following Pre-operative Chemoradiation in Patients with Pancreatic Cancer

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Objective: We investigated long-term results of surgical resection following pre-operative chemoradiation (pre-CRT) for patients with pancreatic cancer that extended beyond the pancreas.

Methods: This study is consisted of 87 pancreatic cancer patients between 2000-2005. Of 35 patients who underwent pre-CRT, 27 patients underwent surgical resection (pre-CRT group). Among the other 52 patients, 41 patients who underwent surgical resection were classified as surgery-alone group. All patients were followed up for at least 65 months or until death, and underwent no adjuvant therapy.

Results: A lower frequency of lymph node metastasis was observed in pre-CRT group, relative to surgery-alone group ($p < 0.05$). The frequency of residual tumor grading in pre-CRT group was significantly dif-

ferent from that in surgery-alone group (R0/1/2%: 52/15/33 vs 22/51/27, $p = 0.004$). The actual survival curve of pre-op CRT group comprising of resected patients only had a favorable tendency, relative to surgery-alone group ($p = 0.053$). When patients who underwent curative resection (R0/1) were abstracted from all patients, there was a significant difference in the actual survival curve between pre-op CRT and surgery-alone groups (1, 3, and 5y; 89, 56, and 44% in pre-op CRT vs 80, 33, and 10% in surgery-alone groups, $p = 0.0228$). A significant difference of disease-free survival curve was found between two groups (disease-free survival rates at 1 year, 3 y, and 5 y; 61, 44, and 39% in pre-op CRT vs 57, 10, and 7% in surgery-alone groups, $p = 0.024$). The rate of local recurrence in pre-CRT group was significantly less than in surgery-alone (11% vs 47%, $p = 0.0024$).

Conclusion: It is possible that long-term survival rate after curative resection following pre-CRT is improved in patients with pancreatic cancer that extended beyond the pancreas.

V-4

Potential Contribution of Preoperative Neoadjuvant Concurrent Chemoradiation Therapy on Margin-negative Pancreatectomy in Borderline Resectable Pancreatic Cancer; YUHS Experiences

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Background: Only margin-negative pancreatectomy can provide the chance for the cure in pancreatic cancer. Borderline resectable pancreatic cancer (BRPCa) has risks of incomplete palliative resection to ruin oncologic outcomes.

Materials and Methods: From Jan 1999 to December 2010, among 202 patients underwent pan-