

# Gastric, Hepatobiliary & Pancreatic Surgery Division

## Research Activities

Gastric :

In June 2006, the results of our ACTS-GC trial gave definitive evidence of the effectiveness of adjuvant chemotherapy. The ACTS-GC trial is a large-scale randomized controlled trial (RCT) to test the effectiveness of adjuvant chemotherapy using TS-1 in patients with stage II and III gastric cancer except for early gastric cancer. As a result, most of the Japan Clinical Oncology Group (JCOG) trials have stopped patient accrual to revise their protocols. One more important result of JCOG trial 9501 appeared this year. This trial was an RCT to test the effectiveness of prophylactic paraaortic lymph node dissection. However, the result was negative, indicating that prophylactic paraaortic lymph node dissection is not recommended in patients with serosa positive advanced gastric cancer.

Several JCOG trials are currently under way.

### 1. Assessment of combined modalities

- 1) JCOG trial 0405: A phase II trial to test the efficacy and feasibility of neoadjuvant chemotherapy using TS-1+CDDP for patients with bulky N2 and N3.
- 2) JCOG trial 0501: A phase III trial to test the efficacy of neoadjuvant chemotherapy using TS-1+CDDP in patients with scirrhous gastric cancer and large size type III gastric cancer against a surgery-alone arm.

### 2. Assessment of surgical procedures

- 1) JCOG trial 0110: A phase III trial to confirm the efficacy of splenectomy in patients with advanced cancer in the upper part of the stomach,

not including cancer on the greater curvature line.

- 2) JCOG trial 0302: A feasibility study for sentinel node navigation surgery for early gastric cancer. However, this trial has been stopped because of a high false negative rate, and is now under discussion whether to continue it or not.

## New Developments

Two new phase III JCOG trials are planned. One is to compare two chemotherapy regimens in patients giving positive cytological results in abdominal lavage; the other, which will start in 2007, is to confirm the efficacy and feasibility of palliative resection of the primary lesion in gastric cancer patients in whom laparoscopic examination has revealed incurable factors.

● T. Kinoshita ●

Hepatobiliary and Pancreatic :

- 1) Reduction surgery for advanced hepatocellular carcinoma (HCC)

The efficacy of reduction hepatectomy (RH) for advanced HCC has been controversial. When hepatectomy with curative intent could not be performed, the possibility of RH, which is defined as resection of the main tumor, was considered. Analysis of the results of reduction surgery validated the new indication for RH in patients with advanced HCC (39, 40).

- 2) Local resection for ampullary tumors

Indications for local resection of ampullary tumors have not been established.

Clinicopathological factors were reviewed

in 53 patients with ampullary tumors. Since positive margins exist in some cases and lymph node metastasis can be present even in patients with pT1 cancer, local resection as a therapeutic approach to ampullary tumors is indicated only in patients with preoperatively diagnosed benign tumors (41).

3) Intraoperative radiation therapy (IORT) for pancreatic cancer

Although IORT has been used for the treatment of pancreatic cancer, the efficacy of IORT is still controversial. Therefore, a multi-institutional prospective randomized trial was conducted, comparing therapeutic efficacy between surgery alone and that with IORT. Patients with resectable pancreatic cancer are preoperatively randomized into the IORT group or surgery alone group. The former group received IORT (25 Gy) to the tumor bed after curative resection. In an accompanying study, late complications of IORT such as extrahepatic portal vein occlusion are being investigated (42).

4) Prognostic factors for hepatic colorectal metastasis

Because chemotherapy for colorectal cancer has dramatically improved, we are carrying out a study to elucidate any prognostic factors that could identify patients who would benefit from surgical resection for hepatic colorectal metastasis. A retrospective analysis has indicated that the coefficient of variation in volume of metastasis and rapid recurrence are predictors of poor survival after resection of hepatic colorectal metastasis. (43, 44)

● M. Konishi ●