

Current State and Future Prospect of Gastric Cancer Treatment in Japan

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Gastric cancer remains the number one cause of cancer in Japan. Every year, 450(four hundred and fifty) thousand patients are diagnosed to have cancer in Japan. Recently, the number of patients dying from lung cancer have been increasing, however, gastric cancer is still remains the most common cancer in Japan

More than 50% of all patients now present in the early stages at Kyushu University and the overall five year survival rate is 75%. A D2 lymph node dissection is the standard operation for such patients, and the rate of a curative operation was 87%.

In 2001, the Japanese Gastric Cancer Association issued its first version of gastric cancer treatment guidelines. The stage-oriented treatment indications are provided in the guidelines, which includes EMR for tumors at an early stage, standard operation, and an extended gastrectomy for those in far advanced stages. A standard gastrectomy includes a resection of the stomach with a D2 dissection according the size and location of the tumor.

Sentinel lymph node navigation surgery is a new concept, which helps us to determine the need to perform a lymph node dissection during operation, since metastasis is considered to form in the sentinel lymph node first.

Laparoscopy assisted distal gastrectomy (LADG) have been widely applied for early staged gastric cancer in Japan. Advantages of LADG are decreased postoperative pain, an early recovery, a short hospital stay, reduced medical costs, and less invasive procedures and better cosmetic results. These days, robotic surgery has been performed in the clinical field.

We have both the da Vinci and ZEUS, devices at our university. Both are Master-slave type operation assisting robots made in the U.S.A. We have performed 62 operations using the da Vinci from July 2000 to June 2002.

While minimum invasive surgery have recently been widely applied to early gastric cancer, aggressive surgery is the treatment of choice in order to cure patients with advanced gastric cancer, including a paraaortic lymph node dissection, and a combined resection of adjacent organs such as the spleen or pancreas. However, the preservation of the pancreas or spleen is now being widely discussed in order to reduce postoperative morbidity and mortality.

As for chemotherapy, 5-FU has been a key chemotherapeutic agent in the treatment of advanced or recurrent gastrointestinal cancer. Despite of several phase III studies, a standard chemotherapeutic regimen has not been established worldwide. Recently, final results of phase III comparing 5-FU vs FP vs UFT/MMC conducted by JCOG were reported. Overall survival of patients treated with FP was not different from 5-FU alone. Newly developed anticancer agents such as CPT-11, TS-1, Paclitaxel, or Docetaxel can be now clinically used that may further improve the prognosis of patients with gastric

cancer. Among them, TS-1 has high antitumor effect and we expect it to be useful for the treatment of advanced or recurrent gastric cancer. At present, three phase III clinical trials are under investigation, which include 5-FU vs TS-1 vs CPT-11/CDDP, TS-1 vs TS-1/CDDP, and TS-1 vs 5-FU/LV.

Postoperative adjuvant chemotherapy has been actively developed in Japan. There were only a few positive single randomized controlled study showing benefit of adjuvant chemotherapy. However, all of meta-analysis of adjuvant chemotherapy for gastric cancer indicated the survival benefit. A nation-wide randomized controlled study in the postoperative adjuvant setting for gastric cancer using TS-1 (ACTS-GC) is under way that may clarify the effect of postoperative adjuvant chemotherapy in gastric cancer.

In this lecture, I would like to introduce, current treatments for gastric cancer in Japan.