

Head & Neck Surgery, Plastic Surgery and Dental Divisions

Introduction

The strategy of head and neck cancer treatment is to improve the patient's survival rate while preserving the significant functions including speech, mastication, swallowing, and cosmetic appearance. In order to achieve this strategy, we have tried to select the best treatment modality and devise new surgery based on the clinico-pathological findings and large database of our head and neck cancer patients.

We have developed and performed original surgical procedures of partial laryngectomy for newly and radiation failed early glottic cancer, partial hypopharyngectomy for early hypopharyngeal cancer and total glossectomy without total laryngectomy for advanced tongue cancer. These therapies can be performed without sacrificing the larynx. Compared with the results of conventional surgery, the wound apparently heals with fewer complications. Patients can resume social activities more easily when they maintain their ability to communicate by speech.

We recently start a new treatment trial of chemoradiotherapy for advanced and inoperable head and neck cancer in cooperation with clinical oncologists at the National Cancer Center Hospital East.

Routine Activities

The Head and Neck Division of the NCCH consists of two head and neck surgeons, a plastic surgeon, and a dentist as regular staff. In our outpatient service, 2 head and neck surgeons of NCCH East are also engaged in routine outpatient activities, including regular follow-up care, and a resident of head and neck division of NCCH East is engaged in general and local anesthetic operations, and supportive care of the inpatients. Several major microsurgical reconstructive surgery under general and local anesthetic are still performed at NCCH,

but most of the head and neck service has moved to the NCCH East 12 years ago.

In 2004, 149 patients with head and neck cancer had undergone surgery under general anesthesia in our division. Twenty-one of these patients were over 75 years old, ranging from 75 to 91. The oldest patient who was treated by microsurgical reconstructive surgery was 79 years old. There were no serious postoperative complications. With the increasing numbers of high-risk patients, we need to establish a treatment policy for these patients in due course.

We performed neck dissection, total pharyngo-laryngo-esophagectomy with or without microsurgical reconstructive surgery and various kinds of surgery in cooperation with other divisions. We have operated on 20 patients for other divisions in this year, and the case load is increasing.

Our outpatient service is available from Monday to Friday, and the total number of newly registered patients exceeds 200 annually. The number of new patients in 2004 was about same as last year (about 330 patients). Endoscopic examinations, cervical echography, and pharyngo-radiography are routinely performed once a week. A weekly clinical head and neck conference is held every Tuesday attended by the head and neck surgeons, radio-oncologists, but challenging cases are discussed in NCCH East. A clinico-pathological meeting is held every Friday to clarify and comprehend the oncological behavior of head and neck tumors.

At the NCCH, the dentist, in the head and neck division, provides the roles as a maxillofacial prosthodontist, oral surgeon, and general practitioner. He provides the after-care, improving the quality of life after patient in post-ablative head neck surgery using maxillofacial prostheses. Prosthetic rehabilitation is included in the oral and maxillary cancer treatment. This year, an oral hygiene program

was set up in Bone Marrow Transplant ward to reduce or to prevent severe odontogenic infection following bone marrow transplantation, and in our ward to reduce local infection after reconstructive surgery for oral cancer.

The plastic and reconstructive surgery division plays an important role in restoring patients' natural appearance and maintaining postoperative functions following head and neck surgery and various kinds of operation of other divisions (see the description of the Plastic and Reconstructive Surgery Division of the NCCHE).

Research Activities

We are taking part in multi-institutional studies related to neck dissection and the standardization of function preservation therapeutic strategy for head and neck carcinoma. Although neck dissection in our field is a very surgical procedure, the standard therapy has not been established until recently. We are currently investigating the neck dissection area and recurrences of mesopharyngeal carcinoma. There is currently no established standardized function-preserving treatment for head and neck carcinoma that will have an improvement on survival, loco-regional control, and preservation of various functions necessary for life. We conducted a research on the relationship between treatment procedures and the pattern of recurrence/ metastasis of various primary

sites of head and neck carcinoma, and came up with the best treatment method with function preservation for each patient.

Clinical Trial

We were able to perform partial laryngectomy in 2 cases of recurrent glottic carcinoma and partial hypo-pharyngectomy with free jejunum or free forearm flap transplantation in 5 other cases of posterior wall and pyriform sinus hypopharyngeal carcinoma. We were able to preserve voice function in all the cases.

Since 2000, over ten advanced cases of hypopharyngeal or laryngeal carcinoma (T3/T4) with esophageal carcinoma were treated using chemoradiotherapy (CDDP+5-FU+RT) in cooperation with the gastrointestinal oncology division. Total laryngectomy was normally necessary for all these cases. However since the hypo-pharyngeal and laryngeal carcinomas respond well to chemoradiotherapy, these patients were able to retain the functions of the larynx (include voice) but as chemoradiotherapy was very effective, all patients could preserve larynx (voice and laryngeal function). Over the period of 40-50 months observation the patients were able to enjoy improved quality of life, and if there is a recurrence of the carcinoma, salvage surgery is still possible for these patients.

● W. Ohyama ●