

Anesthesiology and Pain Clinic Division

Introduction

The Anesthesia and Palliative Care Division consists of nine staff doctors. We conduct all general anesthesia in 15 operating rooms in the central operation ward and one operating room of the Radiotherapy Division, and an operating room for radioisotope therapy in 13B ward besides. We employ several anesthetic management protocols for radical cancer surgery. We also conduct almost all patient management in the Postoperative Care Unit (HCU) and the Intensive Care Unit (ICU). Acute and chronic pain symptoms of cancer patients are treated in the Palliative Care Division, which consists of an outpatient clinic and an acupuncture clinic and room visiting service, according to requests by surgeons.

Routine Activities

In 2004, an annual number of operation was 4991, and 4042 of them were performed under general anesthesia. Of these, 187 were in emergency settings. In addition to the staff anesthetists, 4 to 7 rotating residents work in our division.

Every morning, we discuss our anesthetic plans for all patients of the day, with particular attention to high-risk cases. For these patients, careful perioperative management in cooperation with the surgeons is essential. We are frequently consulted by surgeons about patients with high surgical risks, and we discuss these cases at the weekly conference held on Monday evening. The postoperative courses of high-risk patients are also reported and discussed at this conference.

The method of anesthesia in most cases for abdominal and thoracic surgery is general anesthesia with epidural anesthesia. For neurosurgery, ophthalmologic surgery, head and neck surgery, breast surgery and orthopedic surgery, only general

anesthesia is used. For postoperative pain relief of abdominal and thoracic operation, morphine has been administered epidurally in our division since 1981. With this method, good pain relief can be achieved in most cases and the incidence of postoperative respiratory complication has reduced.

Palliative Care Division performs pain clinic and palliative care which started in 1999 June. Annual number of consult within hospital and from outpatient was about 500 cases, in which 35 cases underwent nerve blocks and 60 cases acupuncture and moxa cauterly. Furthermore, the preoperative assessment for high-risk patients of selective surgery and donor of marrow transplantation was carried out in outpatient clinic.

Research Activities

To maintain the high quality of anesthesia services, we must follow a variety of routine activities as well as stay abreast of new development. One of our routine activities is to be involved in ongoing research. In our hospital it is not unusual for us to encounter patients with severely damaged vital organs. Such cases are discussed at length and reported in annual anesthesia meetings.

Our division is among the most experienced in the world in the use of epidural morphine. We have been studying its basic and clinical aspects, including the pharmacokinetics of morphine, the relationship between its concentration and analgesic effect, and adequate morphine dosages for multi-aged patients of various operations. Epidural morphine is quite useful for preventing postoperative complications, especially respiratory complication, of high-risk patients.

Our main interests in basic and clinical research are as follows :

1. Development of new perioperative management for radical cancer operations such as esophagectomy, hepatectomy and pneumonial lobectomy.
2. Preoperative evaluation of surgical risks in geriatric patients.
3. Drug therapy for cancer-related neurogenic pain.
4. Establishment of oncological anesthesiology and oncological critical care medicine.
5. Study of the effects of acupuncture on cancer-related pain and central and peripheral nervous system symptoms.

● M. Endoh ●

Number of Operations under General Anesthesia

Year	Cases	Emergency
2002	4033	304
2003	4146	364
2004	4042	187