

Anesthesiology and Intensive Care Unit

Introduction

Perioperative care for cancer patients with limited vital organ function is a major challenge for anesthesiologists since, in general, anesthesia and surgery may cause further deterioration in physiological functions. Perioperative impairment of vital organ function has traditionally been defined as surgical stress, determined quantitatively by measuring the physiological parameters representing the corresponding organs. Recent evidence suggests that a stress response to surgery involves not only the vital organs but also the neuro-endocrine-immune system and persists for several days after surgery. Thus, the aim of our anesthetic management is to protect patients from surgical stress by blocking the noxious influences of surgical trauma. This is achieved by regarding anesthetic management as a form of perioperative care.

Routine Activities

As stated above, our colleagues (three staff anesthesiologists and two to three residents) are working as anesthesiologists and intensive care physicians.

In 2006, we performed 2320 anesthetic procedures. The annual number of patients admitted to the intensive care unit (ICU) amounted to 1191. Our concern in ICU management is not only postoperative cardiorespiratory care but also the critical care of patients who have succumbed to organ failure after medical or surgical cancer treatment. The cumulative number of patients with organ failure treated in the ICU since the establishment of the National Cancer Center Hospital East is 410.

An outpatient clinic system was introduced in 1997 to improve preoperative evaluation of anesthetic risk in surgical patients and to participate in the management of intractable pain. This system will

further improve patient safety and the quality of pain control.

Daily activity starts with ICU rounds and pre-anesthesia case presentation. ICU rounds are also made every evening after the completion of elective surgical procedures.

A journal club is held twice a week to maintain up-to-date knowledge of recent advances in anesthesia and critical care medicine.

● A. Kochi ●

Number of patients managed under general or spinal/epidural anesthesia

Year	Total no.	Emergency cases
2002	2041	82 (4.0%)
2003	2159	114 (5.3%)
2004	2265	101 (4.5%)
2005	2261	81 (3.6%)
2006	2320	75 (3.2%)

Number of patients admitted to the ICU

Year	Total no.	Cases (Cases per month)
2002	1042	(86.8)
2003	1065	(88.8)
2004	1033	(86.1)
2005	1049	(87.4)
2006	1191	(99.3)

Prognosis of organ failure treated in the ICU (July 1992 – December 2006)

Primary malignancy	No. of pts	Discharge*	Death*
<i>Postoperative patients</i>			
Stomach	39	26	13
Pancreas & biliary tract	49	17	32
Colorectal	35	21	14
Esophagus	36	18	18
Head & neck	40	31	9
Liver	18	8	10
Panperitonitis	8	3	5
Lung	40	17	23
Others	11	6	5
<i>Post-chemo-radiotherapy</i>			
Head & neck	20	5	15
GI tract	29	10	19
Lung	30	12	18
Others	55	23	32

* Discharge is defined as discharge from the hospital. Death includes patients who recovered from organ failure but subsequently died from the primary disease during hospitalization.

Prognosis in relation to the number of failed organs

No. of failed organs	No. of pts	Discharge	Death
1	199	136	63
2	125	49	76
> 3	86	12	74