this decrease is related to an increase in the number tracheotomy performed. This contents in 43 patients with tracheotomy were analyzed. We feel that tracheotomies have a particularly important role in the post-operative management of patients subjected to hypothermia. Although we stress the importance of tracheotomy, drying and infection of the tranchea were troublesome complications in many patients. As a result, we investigated the complications associated with tracheotomies.

A few rare cases of these complications will be reported. A six month-old baby with hydrocephalus died of suffocation when the tip of a No. 4 tracheotomy canule impinged upon the carina of the trachea with a resulted blockage of the trachea from secretions. Three patients died of suffocation from ulcus formed in the anterior tracheal wall with resulted hemorrhage.

27. Postoperative Management by Rewarming from Hypothermia in Brain Operation

Kenzo MATSUOKA, Eizo OKAMOTO, Toru Uozumi, Ryoichi NOZAKI, Syunnosuke MINAMI, Munéo KAZIMURA, Mitsumasa KANO, Saburo SAKAKI, Masanori NANBA, Takashi KATSUDA and Sataro JITSUKAWA

First Department of Surgery, Osaka University Medical School

The superiority of operation under hypothermia is well recognized in neurosurgical field. It is however, still open to controversy that what is the most optimal method of rewarming after operation under hypothermia from a view point of postoperative management.

Since 1955, we have employed slow rewarming, that maintain hypothermia between 30°C and 34°C after operation and rewarm the patient slowly in 12 to 72 hours postoperatively. We have been able to control the postoperative cumbersome complication such as brain edema, rebleeding and hyperthermia, and favourable results were obtained.

We applied this method in 24 cases, that included 62 cases of brain tumors, 4 cases of cerebral vascular diseases, 2 cases of brain abscess, 4 cases of severe head injuries and 2 cases of other cerebral diseases. Six cases died in one month after operations. Operative mortality was 8.1%.