

A mouth gag was inserted against the teeth and suctioning maintained. Ventilation was spontaneous and unobstructed throughout the procedure which lasted 12 minutes: small packs were left in place along the gum lines at its conclusion. Thirty minutes after induction the patient had a lid reflex, was swallowing and moving his extremities. The only evidence of trauma to the skin resulting from the anesthetic technique was a bleb on the left anterior thigh at the injection site. Postoperatively, desquamation of the lips with secondary infection and bullae formation on the palate occurred. These lesions did not interfere with the patient's oral intake of food and fluids, which resumed the afternoon of the operation. There was no evidence of airway obstruction, and the patient was discharged the following day.

DISCUSSION

The successful anesthetic management of patients with epidermolysis bullosa requires that contact with skin and mucous membranes by be minimized.³ The absence of difficulties following the patient's two previous operations suggests that extreme care was taken to avoid trauma to the airway. This would have been difficult with an inhalation technique in the present case. However, ketamine proved use-

ful in making these conditions possible. Pre-medication was avoided; the patient moved himself to the operating table, and undue handling and excessive needle punctures were avoided. Induction was rapid even though the intramuscular route was used, and the hazards of facial trauma from the use of a mask were avoided. Laryngeal reflexes were maintained and, when combined with the head-down position, aspiration was prevented and adequate ventilation maintained without the need for laryngoscopy, tracheal intubation, or intraoral manipulation. Extractions from all four quadrants were accomplished without repositioning the patient or staging the procedure.

REFERENCES

1. Rock AJ: Textbook of Dermatology. Philadelphia, F. A. Davis, 1968
2. Andrews GC, Donnokos AN: Diseases of the Skin. Philadelphia, Saunders, 1963
3. Marshall BE: A comment on epidermolysis bullosa and its anesthetic management for dental operations. *Brit J Anaesth* 35:724, 1963

Surgery

CNS DYSFUNCTION A prospective study of the conditions of 100 open-heart surgery patients elicited information about incidence, characteristics, and causes of central nervous system dysfunction after operation. Neurologic, psychometric, and behavioral observations were made preoperatively and postoperatively. Half of the patients developed neurologic damage which became evident following recovery from anesthesia. Forty-three per cent of survivors developed behavioral abnormalities preceded by focal neurologic damage; intellectual functions were depressed in all such patients. In most patients neurologic signs and mental symptoms disappeared and mental status had normalized by discharge. However, 15 per cent of survivors had signs of cerebral damage at discharge. Cerebral damage was significantly related to increasing age and depression of arterial pressure. In patients with cerebral dysfunction, arterial pressures decreased to levels which did not support adequate cerebral perfusion. Older patients were especially vulnerable to such effects. Neuropathologic findings suggested cerebral ischemia. (*Tufo, H. M., and others: Central Nervous System Dysfunction Following Open-heart Surgery, JAMA* 212: 1333 (May) 1970.)