

replaced over the airway. As the canister and bag struck the floor, a violent explosion of the remaining cyclopropane and oxygen in the bag took place at floor level. A shredded rubber bag and a frightened operating room personnel were the only unfortunate results, and the anesthetic and operation were completed without further incident.

COMMENT

Possibly our extreme fear of infection of anesthetists while handling tuberculous pa-

tients is not justifiable. Possibly we were over-conscious of the danger of hypoxia in this patient. Certainly we were using apparatus either in defective condition or too hastily and carelessly assembled before induction (loose slip joint). Certainly we believe that had all the precautions enumerated above been followed, this accident would not have occurred.

RALPH M. WATERS, M.D.,

State of Wisconsin General Hospital
Madison, Wis.

RESPIRATORY OBSTRUCTION FROM SUDDEN ONSET OF
LARYNGEAL EDEMA

A colored man of 42 was admitted to the Cincinnati General Hospital because of a fluctuant cervical mass. Swelling had developed along the posterior border of the right sterno-mastoid muscle a few days after extraction of an upper molar tooth with an apical abscess. There was no evidence of respiratory obstruction but the patient coughed occasionally, producing small amounts of sputum. The surgeon believed that the abscess did not approach the trachea but agreed that it was advisable to visualize the vocal cords. Indirect laryngoscopy demonstrated slight thickening of the right ary-epiglottic fold from edema, with no apparent interference to respiration. Nasotracheal intubation was considered, as has been recommended recently (1), but it was decided that the obstruction was slight and that equipment should be made ready in the event that the obstruction might become worse during incision and exploration of the mass.

Preoperative medication consisted of hypodermic administration of morphine sulphate, grain 1/6 and hyosine hydrobromide, grain 1/150, forty minutes before induction of anesthesia with nitrous oxide and oxygen. Anesthesia was maintained for thirty-five minutes with cyclopropane by the to-and-fro absorption technic. At all times there was a slight respiratory obstruction which was attributed to laryngospasm. Twenty-five minutes was required for incision and drainage of the abscess cavity which had burrowed anteriorly nearly to the trachea.

At 11:00 p.m. the anesthetist removed the mask. After two deep and unobstructed inspirations there was a complete block of

respiration. Pressure on the chest was ineffective and cyanosis developed rapidly. The laryngoscope showed complete laryngeal obstruction from edema. Only the epiglottis could be identified as a thick, gelatinous mass. Nasotracheal intubation was abandoned in favor of tracheotomy, which was completed six minutes after the obstruction developed. Spontaneous inspiration occurred immediately and normal respiration was soon established.

The patient remained in the operating room for the next forty-five minutes for observation and oxygen therapy. In the ward from midnight to 2:00 a.m. he exhibited excitement and clonic muscular spasms whenever he was disturbed. He gradually became quieter and seemed normal when the anesthetist saw him at 7:30 a.m. Convalescence was uneventful, with no evidence of permanent cerebral damage from hypoxia. Laryngeal edema disappeared in thirty-six hours.

SUMMARY

A case is presented of sudden respiratory obstruction from edema in a patient with a cervical abscess of dental origin. Immediate tracheotomy saved the patient's life. Transient cerebral effects of anoxia disappeared in a few hours.

MARSHALL L. SKAGGS, M.D.,
University of Cincinnati,
College of Medicine.

REFERENCE

1. Bennett, James H.: Anesthetic Management for Drainage of Abscess of the Submandibular Space (Ludwig's Angina), *Anesthesiology* 4: 25-30 (Jan.) 1943.