ABSTRACTS

Editorial Comment: A fixed style of presentation for this department of ANESTHESIOLOGY has purposely not been defined. It is the wish of the Editorial Board to provide our readers with the type of abstract they desire. Correspondence is invited offering suggestions in regard to the length of abstracts, character of them, and source of them. The Board will appreciate the cooperation of the membership of the Society in submitting abstracts of outstanding articles to be considered for publication.


In this brief statistical study Dr. Gillespie adds another bit of evidence to the question of the role of the endotracheal tube in the production of post-operative respiratory complications. Of nearly 55,000 patients who received anesthesia at the Wisconsin General Hospital between 1940 and 1950 only 185 were deemed sufficiently comparable for this study. All of these received ether by the to-and-fro absorption technique for cholecystectomy; all were in group 2 physical status, and all were thought to be free of respiratory disease prior to operation. Thirty-seven were not intubated; 148 were intubated.

The incidence of major and minor respiratory complications after intubation was 14 per cent as opposed to an incidence of 27 per cent in the patients who were not intubated. Statistical analysis of the data revealed that intubation did not significantly affect the likelihood of respiratory complications, especially major complications.

W. E. D., Jr.


"Very little, if any, material on anesthetic explosions has been presented from the standpoint of the thoracic surgeon, and a very few cases of survivals in an anesthetic explosion have been reported, so that I feel it behooves one with this experience to record it. . . . The author has no claims of being an anesthesiologist, and makes no pretense of discussing the various techniques of anesthesia, the chemistry of anesthetic agents, or the fine points of anesthesia as a whole. The following report is a case in which the author was called upon to aid in such an explosion, and was immediately available. . . .

H. S., a 56-year-old married white man, entered the hospital on Jan. 16, 1950, for the treatment of glaucoma. There was an associated diabetes mellitus, and hypertension—the blood pressure being 170/110. On the fifth hospital day (Jan. 21, 1950) the patient was taken to surgery for an operation on the right eye. Anesthesia consisted of intravenous sodium pentothal with oxygen and nitrous oxide which was administered through a nasopharyngeal tube. . . .

"At the conclusion of the operation there was a loud explosion, and the nasopharyngeal tube was blown out of the patient’s nose, followed by profuse hemorrhage from the nose and mouth. His condition quickly became critical; the blood pressure dropped to 80/40; respirations were labored, and he became quite cyanotic. The author, who happened to be in the hospital, was called to see the patient. A 7 mm. bronchoscope was passed immediately with suction and aspiration of a large quantity of blood from the tracheobronchial tree. The patient resumed
fairly normal respiration, and the cyanosis was relieved. The blood pressure gradually rose to 140/60. However, hemorrhage continued from the tracheobronchial tree, nasopharynx, and into the paraorbital tissues with marked swelling of the right cheek. An incision was made inside the mouth to decompress the swelling of the right cheek, and a pressure bandage was placed over the eyes. The nasopharynx was packed through the mouth to control the hemorrhage and also to prevent blood from running into the trachea; the anterior nares were then packed with gel foam. The bronchoscope was left in place for fifty minutes, but bleeding from the tracheobronchial tree continued, so an endotracheal tube was inserted to facilitate aspiration and to maintain an adequate airway. The patient was returned to his room in fair condition. After returning to his room, the patient was placed on continuous oxygen, the tracheobronchial tree was aspirated frequently, and a blood transfusion was started. There were definite Cheyne-Stokes respirations for the first hour after being returned to his room, and he did not regain consciousness for about three hours. . . . On the afternoon following the explosion, subcutaneous emphysema developed over the right anterior chest. Bleeding from the tracheobronchial tree continued, and about 600 c.c. of bloody fluid had been aspirated through the endotracheal tube. However, hemorrhage from the nasopharynx and into the paraorbital tissues was apparently controlled. A portable chest roentgenogram examination was made which revealed marked subcutaneous emphysema of the thoracic wall and cervical area; marked bilateral infiltration of the lung fields, although more extensive on the right side; and a small pneumothorax space on the right side with mediastinal emphysema.

“The following morning (Jan. 22, 1950) the patient appeared in fairly good condition. The blood pressure was normal (preoperative level), the subcutaneous emphysema had not increased, there was no dyspnea, and bleeding from the tracheobronchial tree had apparently stopped. The packing from the nasopharynx and nose was removed; also the endotracheal tube. Following this, the patient was able to breathe freely, and was quite comfortable. In the afternoon of the second postoperative day (Jan. 23, 1950) the patient developed progressive respiratory distress, the subcutaneous emphysema increased and extended to the head and neck, and the degree of pneumothorax was greater by physical examination. An intercostal catheter was introduced on the right side and attached to underwater drainage. There was an immediate escape of air with relief of the dyspnea, and the patient was again comfortable. . . . On the fourteenth day following the explosion, Feb. 4, 1950, the patient was discharged to the care of the ophthalmologist. . . . The exact mechanism of the anesthetic explosion in the case presented has not been ascertained.”

A. A.


“Although one of the main undesirable effects of the antihistamines in therapeutic usage appears to be due to depression of higher centers, the symptoms observed after overdosage often appear to result from central nervous system stimulation. . . . Inasmuch as the anticonvulsant properties of the barbiturates are well established, it was felt prudent to ascertain whether or not they would serve as a useful antidote in instances of poisoning by antihistamines. . . . Sodium pentobarb-