CURRENT COMMENT AND CASE REPORTS

CURRENT COMMENT is a section in ANESTHESIOLOGY in which will appear invited and unsolicited professional and scientific correspondence, abbreviated reports of interesting cases, material of interest to anesthesiologists reprinted from varied sources, brief descriptions of apparatus and appliances, technical suggestions, and short citations of experiences with drugs and methods in anesthesiology. Contributions are urgently solicited. Editorial discretion is reserved in selecting and preparing those published. The author's name or initials will appear with all items included.

RUPTURED RIGHT BRONCHUS

A man, age 18, was admitted to the hospital following a car accident, in a critical condition. He was markedly dyspneic, mildly cyanotic and had paradoxical breathing on the right. Slight subcutaneous emphysema of the right upper chest, hyperresonance of the entire right chest and hemoptysis were noted. When a No. 16 needle was introduced into the right pleural space, air rushed out. The patient had four brief periods of unconsciousness and apnea while two catheters were being inserted into the right pleural space. These were attached to Kinsella suction apparatus during the time he was receiving oxygen by nasal catheter. His condition improved somewhat, but he remained mildly cyanotic, dyspneic and restless. This restlessness was controlled with chloral hydrate given rectally.

A tracheotomy was performed which facilitated suction of large amounts of bloody mucus and he was given oxygen through the tracheotomy. A Kottke apparatus was employed with a positive exhalation pressure of 1 cm. of water. Roentgenograms of the chest revealed a partially collapsed right lung and fractures of the first, second and third ribs on the right. Additional injuries consisted of concussion, two fractures of the right mandible, a fracture of the right thumb and multiple lacerations. The hemoglobin was 14 Gm., hematocrit 42.5 per cent and leukocytes numbered 9,900. Bronchoscopy revealed a ruptured right main bronchus.

The patient received morphine sulfate, ⅙ grain, and atropine sulfate 1/150 grain, one hour before operation. On arrival in the operating room, he was still receiving oxygen, but was slightly cyanotic, dyspneic and restless. His blood pressure was 120 mm. systolic and 80 diastolic and his pulse was strong and regular at 110. Respirations were 36 per minute. The subcutaneous emphysema had spread over the entire chest, axillae and neck.

Under surital®, curare, nitrous oxide and oxygen, left endobronchial intubation was performed using a Carlens double lumen catheter. Both cuffs were inflated and frequent suctioning was necessary.

Thoractomy was performed through a posterior incision, with removal of the right fifth rib. This revealed that the anterior wall of the right main bronchus was torn from the carina and gaped widely. Through this lesion a catheter was introduced which was connected to a second anesthetic machine. Until actual closure of the bronchus, the right lung was rhythmically inflated with oxygen through the catheter. The bronchus was closed with four 0 silk and both sides of the chest were inflated through the Carlens endobronchial tube.

The patient's color remained normal throughout most of the operation and the vital signs were essentially unchanged. Respiration was controlled and 1,500 cc. of blood was replaced. Just when closure of the pleura was started the heart stopped. In less than a minute cardiac massage was administered and atropine, 1/50 grain, and pronestyl, 5 cc., were given intravenously. The heart resumed its beat in less than a minute at a pressure of 90 mm. systolic and 70 mm. diastolic. Five minutes later

the pressure was 120 mm. systolic and 80 mm. diastolic; the pulse was 120 and remained at this level for the balance of the five hour operation. A total of 1250 mg. of surital® was administered, and 250 units of *d*-tubo-curare chlorine, nitrous oxide, oxygen and ½ ounce of ether were given. Four chest catheters were inserted and connected to Kinsella suction apparatus. The patient was reacting when the surgical procedure was completed.

The postoperative course was uneventful except for a patch of pneumonitis of the right upper lobe which cleared up in four days. An electrocardiogram taken after operation was normal. The catheters were removed on the seventh day and he was discharged on the seventeenth postoperative day in good condition.

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