

On the seventh postoperative day a second laparotomy was done for fresh paralytic ileus. Succinylcholine 40 mg. was used 3 times for intubation and opening and closing the peritoneum under ether anesthesia. Subsequent apnea lasted 7½ hours. The patient had been treated with 1 mg. of the anticholinesterase DFP (diisopropyl fluorophosphate) and 7.5 mg. of prostigmine for paralytic ileus one day prior to the second operation. (*Yonezawa, T., and others: Prolonged Apnea Caused by SCC in a Patient Being Treated for Paralytic Ileus with Anticholinesterase (Japanese), Jap. J. Anaesthesiol. 13: 1008, 1964.*)

ACUTE ASTHMA A significant number of patients do not respond to prompt treatment of bronchial asthma with epinephrine or other bronchodilators. When this occurs the respiratory acidosis that is refractory to the usual forms of therapy appears to be relieved by initial correction of acidemia with sodium bicarbonate, followed by the bronchodilator drugs. This form of therapy occasionally results in transient metabolic alkalosis when the patient is in a state of chronic chloride depletion. (*Mithoefer, J. C., Runser, R. H., and Karetzky, M. S.: Use of Sodium Bicarbonate in the Treatment of Acute Bronchial Asthma, New Engl. J. Med. 272: 1200 (June) 1965.*)

KEROSENE PNEUMONITIS Survival studies were conducted following the instillation of kerosene into the tracheas of rats. Comparison was made between controls and kerosene test animals during and after the use of oxygen at high pressure. One hundred per cent oxygen at three atmospheres prolonged survival, although it did not increase the total survival rate. A significant improvement in survival time was associated with the administration of 100 per cent oxygen at four atmospheres. Complications of oxygen toxicity require further evaluation before a safe clinical regimen can be established. (*Schwartz, S. I., and others: Effects of Drugs and Hyperbaric Oxygen Environment on Experimental Kerosene Pneumonitis, Dis. Chest 47: 353 (Apr.) 1965.*)

OBESITY AND RESPIRATORY FUNCTION Spirometric studies were performed

on 30 obese patients without pulmonary disease and 24 obese patients with various respiratory diseases. The first group showed no change of ventilation. Vital capacity, residual volume, timed vital capacity and maximal breathing capacity were within normal limits. There were abnormal values in two parameters: marked diminution of the expiratory reserve volume and a tendency to hyperventilation of nearly 150 per cent of normal. Since pulmonary function studies performed in the standing position showed the expiratory reserve volume to be near normal it was assumed that the diminution of the expiratory reserve volume was due to mechanical factors, whereas the hyperventilation was thought to be of metabolic origin. The second group of obese patients included cases of obstructive emphysema, chronic asthmatic bronchitis, bronchiectasis, etc. Vital capacity was within normal limits, but the residual volume was definitely increased. Timed vital capacity was decreased and maximal breathing capacity averaged only 62 per cent of the predicted normal. In this group the expiratory reserve volume was likewise strikingly small resulting in a decreased resting expiratory level. A definite tendency toward hyperventilation (nearly 150 per cent of normal) occurred in this group as in group I. Only three obese individuals showed definite diminution of ventilation. None had clinical or radiological evidence of pulmonary disease. (*Krackhardt, H., and Krackhardt, W.: Pulmonary Function and Adiposity (German), Z. Klin. Med. 158: 337 (Apr.) 1965.*)

CARDIAC ARREST A retrospective study of the case histories of 20 infants and children who sustained cardiac arrest during or after anesthesia and operation indicated signs of respiratory embarrassment in three-fifths of the patients prior to cardiac arrest. Pulmonary atelectasis was a common postmortem finding. Other predisposing causes of arrest were fever, anemia, and debility due to disease or previous operation. Of the 20 patients, 8 were successfully resuscitated, 2 by external closed chest massage and 2 by thumping over the precordium. Resuscitation by means of direct cardiac massage was less successful. Three of the 4 children resuscitated by artificial respiration and direct cardiac massage sustained perma-