

(where the thorax is in the normal mid inspiratory position at rest), with chronic laryngeal or bronchial obstruction, and with bronchiectasis and other states, many others are not secondary to air flow obstruction, but may be due to the deep penetration of harmful dusts causing air sac dissolution. There is an associated reduction in arterial and arteriolar vessels, advanced cases having a 70 to 80 per cent reduction in normal vascular architecture. Right ventricular hypertrophy occurs, its severity being correlated with the extent of the disease except in gibbous deformities where it may be associated with vascular root distortion rather than with vascular occlusion as a result of the distension-dissolution process. Resistance to air flow in these lungs was from three to ten times normal and the average flow rate about one-half normal. (Wyatt, J. P., and Smeets, H.: *The Morphogenesis of Panlobular Emphysema*, *Amer. Rev. Resp. Dis.* 83: 426 (Mar.) 1961.)

COR PULMONALE The most common cause of cor pulmonale is emphysema, though many cases of tuberculosis and bronchiectasis which would formerly have died of infection now develop it. In pulmonary embolism, myocardial infarction and valvular heart disease, mortality is more than twice as high in patients with emphysema. Cor pulmonale may be secondary to both hypoxia and pulmonary hypertension. The hypertension is much more marked in the latter group, though it is present in the other. Arterial oxygen saturation is always below normal in cor pulmonale, and if below 85 per cent and accompanied by marked polycythemia and carbon dioxide retention, probably indicates a primary pulmonary etiology of right heart failure. Electrocardiogram and roentgenograms may not aid in the diagnosis. During exacerbations of emphysema with bronchitis, renal ischemia also may occur. Long term treatment of emphysematous patients with acetazolamide may be of benefit partly by reducing hypercapnia and partly by aiding diuresis. Digitalis, diuretics, specifically indicated antibiotics, tracheal suction, tracheostomy, aerosolized bronchodilators and the cautious use of oxygen with or without mechanical assistance to ventilation, avoidance of drugs depressant to respiration, and

small repeated phlebotomies all can contribute to the treatment of cor pulmonale. (Muschelhein, C.: *The Growing Importance of Pulmonary Heart Disease as a Cause of Congestive Cardiac Failure*, *Amer. Rev. Resp. Dis.* 83: 475. (Apr.) 1961.)

RESPIRATORY ACIDOSIS Administration of Ringer's lactate solution to dogs during acute respiratory acidosis results in a greater ion secretion by the kidney and, therefore, greater conservation of bicarbonate bound base than after administration of 5 per cent glucose and water. Surgical trauma superimposed on the acute respiratory acidosis resulted in no further changes in this response. (Hutchin, P., McLaughlin, J. S., and Hayes, M. A.: *Renal Response to Acidosis During Anesthesia and Operation: III. Maintenance of Homeostasis in Acute Respiratory Acidosis During Intravenous Infusion of Ringer's Lactate and 5 per cent Glucose in Water*, *Ann. Surg.* 154: 161 (Aug.) 1961.)

ASPIRATION Prior to induction of ether anesthesia, 150 patients were given 1 ml. of methylene blue and instructed to distribute this evenly within the oral cavity. One hundred patients were given open drop ethylchloride-ether anesthesia; 50 received ethnitrous oxide-oxygen anesthesia using endotracheal intubation. Following surgery, bronchoscopic examination was performed. Twenty-seven per cent of the patients who had received open drop ether anesthesia and 16 per cent of those who had their trachea intubated showed aspiration. (Klimpel, L.: *Bronchoscopic Examinations for Aspiration following Narcosis*, *Der Anaesthetist* 10: 310 (Oct.) 1961.)

RESPIRATORY UNIT Respiratory care is necessary in a variety of illnesses in which respiratory failure is a transient but potentially lethal episode. Tracheostomy should usually be performed early. A cuffed rubber tube is used, care being taken not to over-inflate the cuff. Humidification is necessary. The control of IPPR is based on clinical observation of the patient's condition, helped by measuring the respiratory volume. In cases of doubt it is helpful but not essential to have