right lung was similarly treated, with further improvement. It is felt that this treatment exerts its benefits by washing inspissated material from the tracheobronchial tree. (*Wasserman, K., and others: Lung Lavage (Alveolar Washing) in Alevolar Proteinosis, Amer. J. Med. 44: 611 (April) 1968.*)

PULMONARY FUNCTION Tests of pulmonary function were done before and at varying intervals after phrenic nerve section for phrenicofacial anastomosis in 14 patients with facial paralysis. Vital capacity decreased moderately postoperatively but by six months had returned to preoperative levels. Maximum breathing capacities and maximum flow rates were low prepoeratively (probably due to difficulty in performing the tests due to facial paralysis) and improved postoperatively. Distribution of inspired gas, measured by the single-breath test, was unaffected by phrenic nerve section. Unilateral phrenic nerve section has remarkably little effect on ventilating capacity in subjects with normal lungs. (*Fackler, C. D., and others: Effect of Unilateral Phrenic Nerve Section on Lung Function, J. Appl Physiol. 23: 923 (Dec.) 1967.*)

ELECTROPHRENIC RESPIRATION Radiofrequency electrophrenic respiration (EPR) has been used successfully on a long-term intermittent basis to manage a patient with pulmonary hypoventilation. The ability to use it only when desired, to adjust the amplitude of stimulation, and to control the rate of stimulation externally, has been made possible by use of the technique of radiofrequency transmission. EPR by stimulation of one phrenic nerve was carried out each night for ten months in one patient. Moderate fatigue of the stimulated diaphragm could be demonstrated after ten hours of stimulation. Further observation is required to determine if such fatigue is progressive. The future uses of radiofrequency EPR may include any condition of hypoventilation associated with an intact phrenic nerve and diaphragm. (*Judson, J. P., and Glenn, W. W. L.: Radio-Frequency Electrophrenic Respiration. Long-term Application to a Patient with Primary Hypoventilation, J.A.M.A. 203: 1033 (March) 1968.*)

CHEYNE-STOKES RESPIRATION Patients who had congestive cardiac failure were divided into those having Cheyne-Stokes respiration (CSR), and those with normal respiratory patterns. Clinical, circulatory and ventilatory response factors were studied. Both groups had decreased cardiac indices but, in addition, those with CSR had circulation times twice those of patients without CSR. Inhalation of 2 per cent CO_2 increased minute ventilation of patients with CSR and diminished the cyclic respiration. During breathing of air, alveolar carbon dioxide tension varied between 25 (hyperpnea) and 37 (hypopnea) mm Hg. Inhalation of 2 per cent CO_2 resulted in cyclic Pa_{CO_2} variations of 31 to 36 mm Hg. Femoral arterial blood gases were completely out of phase with alveolar gas tension; Pa_{O_2} during hypopnea was 75 mm Hg while during hyperpnea it was 60 mm Hg; Pa_{CO_2} during hypopnea was 33 mm Hg while during hyperpnea it was 39.5 mm Hg. The primary determinant of periodic respiration in patients with heart disease is prolonged circulation time (greater than 25 seconds). When CSR is seen with shorter circulatory delays, increased neural excitability, anemia or hyperemia probably is implicated. (*Lange, R. L., and others: Observation and Stimulation of the Circulation, Acid-Base Balance, and Response to CO_2 in Cheyne-Stokes Respiration, Circulation 37: 331 (March) 1968.*)

TRANSTRACHEAL VS IPPB The effectiveness of preventing postoperative pulmonary complications by instilling Alevair into the trachea through a percutaneous catheter was compared with intermittent positive-pressure ventilation in 50 patients. Of the 25 patients treated by the percutaneous catheter technique, one developed tracheobronchitis; the others were free of postoperative pulmonary complications. Of the 25 patients treated with IPPB postoperatively, ten developed pulmonary complications, including tracheobronchitis (1), atelectasis (4), pneumonitis (2), and severe pneumonia (3). (*Rochlin, L.: Percutaneous Endotracheal Catheterization and Intermittent Positive Pressure Breathing in the Prevention of Postoperative Pulmonary Complications, Amer. J. Surg. 115: 333 (March) 1968.*)