

increase in serum potassium was 0.3 mEq/l, with the greatest increase occurring in patients receiving methohexital-succinylcholine induction. However, the highest serum potassium value found was 5.6 mEq/l, suggesting that a dangerous increase during ECT is unlikely. Interestingly, the severity of the seizure did not correlate with serum potassium elevation. A.J. Newson (Auckland) discussed the clinical significance of elevated creatinine phosphokinase (CPK) levels. He presented evidence that although CPK is a nonspecific test, some patients with congenital defects of the musculoskeletal system do have markedly elevated levels, and these patients have a higher likelihood to develop malignant

hyperpyrexia. Dr. Pilditch and Dr. Newson shared the Gilbert Brown Prize for their research studies, which prize is open to recently qualified specialists.

Singapore has again been chosen as the venue for the Fourth Asian Australasian Congress of Anaesthesiologists in September 1974. The unique cultural and geographic features of this city promise to combine with a meeting of high scientific standards to make the journey a most worthwhile one.

MICHAEL J. COUSINS, M.B., F.F.A.R.A.C.S.
*Assistant Professor of Anesthesia
Stanford University
Stanford, California*

Literature Briefs

Myron B. Laver, M.D., Editor

Literature Briefs were submitted by Drs. R. D. Bastron, J. Bland, M. Broenne, L. Cronau, B. Dalton, B. Das, M. Edwards, A. Goldblatt, J. Levitt, W. Mannheimer, and J. Reitan. Briefs appearing elsewhere in this issue are a part of this column.

Circulation

PROPRANOLOL AND RENIN-DEPENDENT HYPERTENSION Propranolol is known to inhibit renin secretion in man. The effects of propranolol were studied in 47 hypertensive patients who had not received other medication for at least a month. Patients were classified as having high, normal, or low renin activity. The groups were comparable with respect to baseline blood pressures, ages, and durations and doses of propranolol treatment. The antihypertensive effects were related to pretreatment renin levels and the decrease in renin activity with propranolol therapy. There was no antihypertensive response in the low-renin patients. The mode of action on renin release is not known. The

authors believe the myocardial depression from beta-adrenergic blockade is offset by a decrease in afterload except in patients with low-renin hypertension in whom decreases in blood pressure would not be expected. Drug therapy which corrects hormonal abnormalities may provide a better basis for the treatment of certain types of hypertension than the traditional approach. (Buhler, F. R., and others: *Propranolol Inhibition of Renin Secretion*. *N. Engl. J. Med.* 287: 1209-1214, 1972.)

Respiration

HUMIDIFIER FEVER Three cases of acute interstitial pulmonary disease caused by humidifiers are reported. Several hours after exposure to various kinds of humidifiers, located in the patients' home, office, and workshop, respectively, the following symptoms were encountered: fatigue, chills, fever, with temperatures to 104 F, dry irritating cough with (late) hemoptysis, severe dyspnea and diffuse, nodular infiltrates in the chest

x-ray. These symptoms disappeared within hours or one to two days after removal of the humidifiers, and reappeared promptly on re-exposure. None of the three patients had a history suggestive of atopic disease. Precipitating antibodies in the serum could be demonstrated in only one case. Skin tests were negative. "Humidifier fever" was first described in 1959. Allergic interstitial pneumonitis secondary to contamination of air-conditioning units has been reported of late, as well as sensitization after inhalation of various pollutants. These can act as antigens and may be microbial (actinomycetes, as in "farmer's lung," or other microorganisms), or due to plant dust (as in bagassosis) or animal proteins. The three cases herein described showed the classic clinical course of extrinsic allergic alveolitis. The correlation between clinical onset and exposure to a humidifier was evident in each case. An allergic etiology, though probable, could not be clearly demonstrated. In some cases the onset of the disease is more insidious and the course chronic, eventually resulting in pulmonary fibrosis. (Keller, H., Spengler, H., and Lutschka, U.: *Humidifier Fever*. *Schweiz. Med. Wschr.* 102: 865, 1972.) ABSTRACTER'S COMMENT: The implications regarding use of inhalation therapy equipment are evident. However, one should not lose sight of the possibility that chemical contaminants in the equipment (residuals of the manufacturing or sterilization process) may be the offending agents. The three case histories are impressive and should be read in the original, as should one of the references quoted: *Banaszak and others, N. Engl. J. Med.* 283:271, 1970, and the editorial comment, entitled "Hypersensitivity Pneumonitis: Pandora's Box," *ibid.*, p. 314. In the paper abstracted above, no treatment other than removal of the offending humidifier is suggested. Treatment with corticosteroids may be of value.

THERAPY OF RESPIRATORY FAILURE

A retrospective study of patients with acute respiratory insufficiency superimposed on chronic obstructive pulmonary disease revealed 24 deaths in 68 patients admitted

to the respiratory care unit of a university hospital. Twenty-three patients received conservative therapy during their hospital stays and another 22 were treated with mechanical ventilation immediately on arrival in the respiratory unit. There were three deaths in each group. In another 23 patients, respirator treatment was instituted only after failure of conservative therapy. Eighteen patients from this group died in the hospital. Circumstantial evidence based on failure of conservative therapy suggests that this group was selected as the high-risk group. However, one cannot rule out completely the prolonged conservative therapy as a contributory factor in the deaths of some of these patients. (Sluiter, H. J., and others: *Conservative and Respirator Treatment of Acute Respiratory Insufficiency in Patients with Chronic Obstructive Lung Disease: A Reappraisal*. *Am. Rev. Resp. Dis.* 105: 932, 1972.) ABSTRACTER'S COMMENT: Evaluation of conservative therapy versus early mechanical ventilation in acute respiratory failure superimposed on chronic obstructive pulmonary disease is difficult. Mortality figures are likely to be influenced by 1) the degree of progress of chronic obstructive changes, and 2) the overall experience of the physician with the subtleties of total care associated with early mechanical ventilation.

Paraphernalia

COMPUTERIZED EVALUATION OF ELECTROLYTE AND ACID-BASE DISORDERS A computer program which will collect and evaluate data on electrolyte and acid-base disturbances has been developed. After initial laboratory data are entered, the computer asks pertinent questions and then produces an evaluation note, often with an explanation of the pathophysiology, differential diagnosis, recommendations for further studies and treatment, and references. The program is available in many areas at a cost which makes it practical for use in clinical care and teaching. (Bleich, H.L.: *Computer-based Consultation—Electrolyte and Acid-Base Disorders*. *Am. J. Med.* 52: 285-291, 1972.)