

Literature Briefs

C. Philip Larson, Jr., M.D., Editor

Literature Briefs were submitted by Drs. R. Boettner, A. Boutros, D. L. Bruce, T. B. Caldwell, H. Cascorbi, R. B. Clark, M. I. Gold, J. W. Pender, F. C. McPartland, A. D. Sessler, S. M. Shnider. Briefs appearing elsewhere in this issue are part of this column.

Circulation

CHAOTIC ATRIAL TACHYCARDIA
Chaotic atrial tachycardia, or an atrial rate faster than 120 beats/min with P waves of varied morphology and a PR interval that changed over three consecutive beats, in 31 patients was reported. This rhythm progressed to atrial flutter or fibrillation in 17 patients (55 per cent). It was associated with chronic or acute pulmonary disease in 12 patients (39 per cent), but also developed during acute illnesses not involving the lungs. It was not associated with digitalis toxicity or hypokalemia, and digitalis was not useful in its treatment until it progressed to atrial fibrillation. (Lipson, M., and Naimi, S.: *Multifocal Atrial Tachycardia (Chaotic Atrial Tachycardia)*, *Circulation* 42: 397 (Sept.) 1970.)

CONGESTIVE HEART FAILURE
Removal of the tricuspid valve produced congestive heart failure in nine dogs, six with ascites and three without ascites. Measurements before and during the heart failure showed normal sodium balances in dogs without ascites and positive sodium balances in most of those which developed ascites. Antidiuretic hormone values in blood were increased in all dogs which developed ascites but did not change in those without ascites. No consistent changes in plasma aldosterone, norepinephrine, or renin activity were observed. (Belcau, L., and others: *Studies on the Mechanism of Experimental Congestive Heart Failure in Dogs*, *Canad. J. Physiol. Pharmacol.* 48: 450 (July) 1970.)

ISUPREL
Infusion of isuprel resulted in a 60 per cent increase in the stroke volumes of five patients with constrictive pericarditis. Increase in stroke volume was not accompanied

by change in pulmonary wedge pressure, implying that the increase was due to more complete emptying of the left ventricle rather than to changes in left ventricular filling. Systemic and pulmonary vascular resistances decreased 144 and 564 dyne sec/cm², respectively. (Nakhjavan, F., and Goldberg, H.: *Hemodynamic Effects of Catecholamine Stimulation in Constrictive Pericarditis*, *Circulation* 42: 487 (Sept.) 1970.)

ACUTE MYOCARDIAL INFARCTION
Acute myocardial infarction was evaluated both hemodynamically and clinically in 123 consecutive patients admitted to the Duke University Medical Center. Right atrial O₂ saturation was below 70 per cent in each of 97 patients, and A-V oxygen differences exceeded 5.0 volumes per cent in 78 patients. Cardiac indexes were below 3.0 l/min/m² in 65 of 98 patients. Twenty-nine per cent of Class II patients and 20 per cent of Class III patients had right atrial pressures below 8 mm Hg, indicating that left ventricular failure resulting in rales or in gallop rhythm is not necessarily accompanied by right ventricular failure. (Ramo, B., and others: *Hemodynamic Findings in 123 Patients with Acute Myocardial Infarction on Admission*, *Circulation* 42: 563 (Oct.) 1970.)

TELEMETRY IN CORONARY CARE
By means of a telemetry-medical command system, a program based on cooperation between in-hospital physicians and mobile paramedical rescue crews, 146 consecutive victims were monitored remotely by telemetered electrocardiograms over a two-year period. Of those successfully monitored, ventricular fibrillation or standstill was found in 15 per cent, while bradyrhythmias were found in 6 per cent. Response times of the rescue vehicles were four minutes or less in 80 per cent of the cases. Defibrillation of a victim outside the hospital was monitored by radio. This mobile emergency care system offers advantages over new and special physician-staffed systems in that it has very fast response times, uses highly