

Literature Briefs

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Literature Briefs were submitted by Drs. C. M. Ballinger, A. Boutros, D. R. Buechel, R. B. Clark, J. J. Downes, M. I. Gold, D. H. Morrow, J. W. Pender, H. Roe, P. H. Sechzer, A. D. Sessler, and W. C. Stevens. Briefs appearing elsewhere in this issue are part of this column.

Circulation

BIGEMINAL RHYTHM Destruction of the bundle of His abolished bigeminal rhythms produced by epinephrine in dogs anesthetized with cyclopropane. However, bigeminal rhythms continued to occur after destruction of the AV node. Destruction of the bundle of His did not prevent multifocal ventricular arrhythmias, but did increase the dose of epinephrine required to induce them. (Sasyniuk, B. I., and Dresel, P. E.: *The Effect of Destruction of the Bundle of His or the Atrioventricular Node on Cyclopropane-Adrenaline Cardiac Arrhythmias*, *Canad. J. Physiol.* 48: 207 (April) 1970.)

CARDIAC TRAUMA Electrocardiographic and circulatory studies in dogs with experimental cardiac trauma (strangulation of the heart after rupture of the pericardium, dislocation of the heart, cardiac concussion and contusion, intramyocardial hematoma or cardiac tamponade) were performed. Electrocardiographic signs were manifold and did not permit accurate diagnosis or localization of the lesion. Clinical experience with patients indicated, however, that accurate electrocardiographic diagnosis of the lesion was not necessary. Surgical exploration of the heart should be undertaken if the electrocardiogram is abnormal and there is a history of trauma to the chest wall or circulatory collapse develops with no evidence of significant hemorrhage and despite shock therapy. (Harbauer, G.: *ECC Findings in Experimental Trauma to the Heart: Investigations in Dogs*, *Der Anaesthetist* 19: 41 (Jan.) 1970.)

CARDIAC OUTPUT NOMOGRAM A nomogram which permits estimation of cardiac output from dye dilution curves in less than a minute using only a pencil and straight rule has been devised. Comparison of the results obtained with this nomogram with those obtained by the method of Hamilton gave a correlation coefficient of 0.998. The nomogram can be applied to a wide range of normal cardiac output values but cannot be used when the washout curve has a distorted downward slope, such as is seen in patients in congestive heart failure or patients with intracardiac shunts. (Olley, P. M., Kidd, B. S. L., and Zelin, S.: *Cardiac Output: Rapid Estimation from Indicator Dilution Curves Using a New Nomogram*, *Canad. J. Physiol.* 48: 147 (Feb.) 1970.)

TETANUS MYOCARDITIS Sixteen cases of severe tetanus were studied. In this, as well as other studies, pneumonia is the main cause of death, with cardiac failure ranking second. Even in nonfatal cases, severe cardiovascular abnormalities such as fixed or labile hypertension, hypotension, tachycardia, or bradycardia were seen. Sedation and maintenance of normal oxygenation and ventilation had no effect on the hypertension. Postural changes sometimes caused severe hypotension in patients previously hypertensive. Tachycardia could change suddenly into severe bradycardia, but fibrillation was not observed. In all fatal cases in which cardiac failure had been evident during life severe degenerative changes in the myocardium were found at autopsy. No satisfactory explanation for "tetanus myocarditis," which cannot be prevented by the most modern and careful treatment, was found. (Drost, R. and others: *Cardiac Involvement in Tetanus*, *Der Anaesthetist* 19: 109 (March) 1970.)

OXYGEN CONSUMPTION Indexed rates of oxygen consumption (VO_2/BSA) were determined for 879 patients, mostly children.