

CARDIAC ARREST Cardiac arrest is an occasional complication of nasotracheal aspiration performed in a postoperative patient for the treatment of retained tracheobronchial secretions. Although vagal stimulation alone may not cause cardiac irregularities, such stimulation in the presence of hypoxia and during the sudden reversal of hypercarbia may produce cardiac arrhythmias and even cardiac arrest. Experimental studies have demonstrated that endogenous carbon dioxide can accumulate to dangerously high levels in relatively short periods. A rapid reversal of this results in a sudden, precipitous fall in carbon dioxide tension, with a concomitant rise in pH and plasma potassium level. The transient increase in potassium concentration coincides with the period of maximal electrocardiographic abnormality. Since patients requiring nasotracheal aspiration for airway obstruction may be both hypoxic and hypercarbic, suction periods should be brief (less than five seconds), and oxygen should be administered simultaneously. (*Fineberg, C., Cohn, H. E., and Gibbon, J. H.: Cardiac Arrest During Nasotracheal Aspiration, J. A. M. A. 174: 148 (Sept. 24) 1960.*)

VENTRICULAR TACHYCARDIA The intravenous injection of epinephrine (0.01 cc./kg.) in 54 attempts in the dog during ventricular ectopic tachycardia failed to produce ventricular fibrillation. The tachycardia was slowed down or moderately increased in most experiments. (*Scherf, D., Tanner, D., and Yildiz, M.: Effect of Epinephrine on Experimental Ectopic Ventricular Tachycardia, Proc. Soc. Exp. Biol. Med. 105: 30 (Oct.) 1960.*)

AURICULAR DEFIBRILLATION By the action of an electrical device on the heart to produce defibrillation of the atrium during mitral commissurotomy, in 3 patients the fibrillation ceased, although it had lasted continuously for several years. The contractions of the heart became rhythmic and slower; the atrium participated in the contractile activity (a P wave appeared in the ECG), and the pulse deficit disappeared. The clinical importance of the defibrillation method is obvi-

ous: the most dangerous period for the patients—the immediate postoperative period—is associated with regular rhythmic and efficient activity of the heart. Under these circumstances there is much less strain on the heart and the general condition of the patients is thereby improved. (*Vishnevskii, A. A., Tsukerman, B. M., and Smelovskii, S. I.: Elimination of Auricular Fibrillation by Method of Electrical Defibrillation of Atrium, Klin. Med. 37: 26, 1959.*)

VENOUS RETURN Blood returns to the heart because of the existence of a venous pressure gradient of 3 to 4 mm. of mercury, operant between the reactive venous reservoir and the central venous conduit. Augmentation of sympathetic tone produces an increase in venous return due to an increase in the effective "intravenous" pressure gradient from 3 to 4 mm. of mercury to 5 to 10 mm. of mercury. The venous system has the ability to independently increase venous return. The venous system can serve as a buffer against the effects of sudden momentary changes in arterial flow by maintaining, reducing, or augmenting venous return. (*Bartelstone, H. J.: Role of Veins in Venous Return, Circulat. Res. 8: 1059 (Sept.) 1960.*)

VENOUS PRESSURE Distention of the urinary bladder by instillation of 50 cc. of fluid into an empty bladder produces an increase in venous pressure and venomotor tone as determined by measurements on intact isolated superficial venous segment of the forearm in man. Such a response could be eliminated by a regional procaine block. It was found to be absent in a patient with a complete transection of the spinal cord. It is concluded that bladder distention initiates a spinal venomotor reflex producing an increase in the peripheral venous tone in the superficial veins of the forearm of man. (*Burch, G. E., and DePasquale, N.: Effect of Bladder Distention on Venous System of Man, Proc. Soc. Exp. Biol. Med. 105: 173 (Oct.) 1960.*)

ELECTROENCEPHALOGRAM The usefulness of the electroencephalogram in detect-