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Drugs

MEPERIDINE AND THE CIRCULATION The effects of meperidine on forearm and leg blood flow were studied in 46 volunteers. Six had either right or left heart failure. One mg/kg of meperidine was injected intravenously. In both groups, blood flow increased significantly, arterial and venous resistance decreased, and venous tone and distensibility remained unchanged. The blood flow increase in the patients in heart failure was only half as great as in the others. These effects of meperidine were not mediated through histamine release or via cholinergic nerves, since neither cyproheptadine nor atropine modified them. The beneficial effect of meperidine in acute pulmonary edema probably results from peripheral vasodilatation and reduction in arterial resistance. (Nadasdi, M., and Zsotes, T. T.: *The Effect of Meperidine on the Peripheral Circulation*, *Clin. Pharmacol. Ther.* 10: 239, 1969.)

COCAINE The effects of cocaine on vagal escape and on the tachycardia resulting from vagal stimulation were studied in atropinized dogs. All such dogs had previously undergone acute cervical section of the spinal cord and acute or chronic sympathetic denervation. Cocaine, 5 mg/kg intravenously, enhanced ventricular escape. The effects of a continuous infusion of cocaine were more reproducible than those of a single injection. Cocaine, 40 µg/kg/min intravenously, potentiated the tachycardia due to vagal stimulation in the atropinized dog. Chronic thoracic sympathectomy markedly retarded the recovery of the ventricular rate from the inhibitory action of vagal stimulation. Under this condition, the infusion of cocaine did not enhance ventricular escape significantly. Such findings suggest that an adrenergic mechanism located at the sympathetic nerves supplying the heart is involved in the phenomenon of vagal escape. (Campos, H. A., and Urquilla, P. R.: *Action of Cocaine and Chronic Sympathetic Denervation on Vagal Escape*, *J. Physiol.* 200: 311 (Feb.) 1969.)

PROPRANOLOL When used in the treatment of hypertension, propranolol is at least as effective as bethanidine, guanethidine, and methyl dopa. It does not produce postural or exercise hypotension, is very acceptable to patients and produces the best control of the supine blood pressure. Close follow-up of 17 patients treated with a variety of drugs showed that diastolic pressures of 100 mm Hg or less were achieved in more patients with propranolol than with guanethidine, bethanidine, or methyl dopa. The hypotensive effect often takes six to eight weeks to reach its maximum. (Prichard, B. N. C., and others: *Treatment of Hypertension with Propranolol*, *Brit. Med. J.* 1: 7 (Jan.) 1968.)