

W. W., Morgan, J. G., and Hillard, E. K.: *Assessment of Condenser-Humidifiers with Special Reference to a Multiple-Gauze Model, Brit. Med. J. 1: 300 (Feb. 2) 1963.*

**TRACHEOTOMY** The performance of tracheotomy in infants may be difficult. General anesthesia is always advisable unless there is an obviously impassable obstruction. The trachea should be intubated as the first step, and as soon as possible thereafter a soft rubber catheter should be passed through the tracheal tube to remove secretions. Apnea may come on immediately after the trachea is opened, and artificial respiration may occasionally be needed at this stage. Mucolytic aerosols may be of help. An anesthetist should be present at the time of closure of the tracheostomy. A common finding at this time is some degree of obstruction of the trachea with inspiratory stridor, caused by partial collapse of the anterior wall around the opening and some sucking in of the neck tissues. The tracheostomy opening almost always closes spontaneously and only rarely needs suturing. (Fennell, G.: *Management of Tracheotomy in Infants, Lancet 2: 808 (Oct. 20) 1962.*)

**RESPIRATORY UNIT** In a respiratory insufficiency unit, it is essential that the ward be open, that the patients' heads be placed towards the center of the ward and that all the essential nursing services be grouped compactly near the patients' heads. This may be done by means of a retractable overhead beam containing electrical outlets, suction, humidifying apparatus, oxygen outlet, respirator supports, compressed air, nurse call system, radio or television, and containers for instruments, dressings and catheters. (Hercus, V.: *Planning a Respiratory Unit, Brit. Med. J. 2: 1605 (Dec. 15) 1962.*)

**GUANETHIDINE** In hypertensive and normotensive males, the effects of intravenously and orally administered guanethidine were observed on the systemic and splanchnic circulations, the sympathetic nervous system and vascular catecholamine stores. An immediate transient pressor effect, presumably due to release of stored catecholamines, was fol-

lowed by a hypotensive effect in hypertensive patients only. This depressor phase was associated with a decrease in cardiac output in compensated cardiacs and an increased output in patients with decompensated hearts, as well as a decrease in the total peripheral resistance in all patients. At the same time there was increased splanchnic resistance and a fall in estimated hepatic-portal blood flow. Sympathetic nervous system activity, as tested by respiratory-vasomotor reflexes, was incompletely inhibited in both acute and chronically medicated patients. Further, catecholamine stores were not severely depleted in either group as evidenced by active responses to both tyramine and ephedrine. Catecholamine depletion is not important in the hypotensive action of guanethidine in man and in addition to a peripheral block of nerve terminals proximal to the site of norepinephrine release, there may be a direct depression of myocardium and vascular smooth muscle. (Cohn, J. N., Liptak, T. E., and Fries, E. D.: *Hemodynamic Effects of Guanethidine in Man, Circ. Res. 12: 298 (Mar.) 1963.*)

**GUANETHIDINE** Guanethidine (10 mg./kg.) given intravenously to dogs abolished the chronotropic and inotropic responses to supra-maximal, post-ganglionic cardioaccelerator nerve stimulation within 30 minutes. The block persisted three hours before reduction of norepinephrine in atrial tissue was evident. Subsequent infusion of norepinephrine failed to reverse the block. Following reserpine (2 mg./kg.) intravenously, adrenergic blockade did not occur for five hours even though atrial norepinephrine fell from control levels. It was not until the level had fallen below 0.3  $\mu\text{g./g.}$  that the block developed which also was unresponsive to infused norepinephrine and dopamine. Guanethidine blockade is independent of depletion of stored adrenergic transmitter. Reserpine blockade, on the other hand, probably depends on depletion of tissue norepinephrine. (Gaffney, T. E., Chidsey, C. A., and Braunwald, E.: *Study of the Relationship Between the Neurotransmitter Store and Adrenergic Block Induced by Reserpine and Guanethidine, Circ. Res. 12: 264 (Mar.) 1963.*)