

pends more on an uncomplicated course of recovery than on the extent of resection. Even bilateral reactions usually lead to good long term results. (*Mockenkaupt, J.: Ventilatory Studies Five Years after Segmental or Upper Lobe Resections, Thoraxchirurgie 14: 137 (July) 1966.*)

**METHEMOGLOBINEMIA** Cyanosis without significant cardio-respiratory impairment was diagnosed and confirmed as methemoglobinemia in two cases reported. The methemoglobin levels were greater than 1.5 g./100 ml. Treatment with methylene blue injected intravenously slowly (1-2 mg./kg.) is recommended if hypoxia is present, otherwise removal of the cause is sufficient therapy. (*Clinical Anesthesia Conference. New York J. Med. 66: 2145 (Aug.) 1966.*)

**CONTROLLED VENTILATION** A comparison of the effects of spontaneous respiration to those of controlled ventilation after open heart operations has led to the routine use of controlled ventilation for six to twenty hours in the immediate postoperative period. The patients studied were returned to the recovery room with a plastic cuffed endotracheal tube in place; they were allowed to waken to a level whereby they understood and responded to commands. Narcosis and sedation were maintained by using controlled ventilation with a 20 to 40 per cent mixture of nitrous oxide and oxygen. Morphine and Phenergan were administered as needed to assure the patients' submission to the automatic settings of the ventilator. The ventilator was arbitrarily set at 16 to 20 breaths per minute. Minute ventilation was determined clinically by observing the excursion of the chest wall and was adapted to the size of the patient. The advantages of controlled ventilation include (1) avoidance of tracheostomy, and (2) marked reduction in incidence of hypoxia, acidosis, hypercarbia, hypotension, and major atelectasis. (*Lefemine, A., and Harken, D.: Postoperative Care following Open Heart Operations; Routine Use of Controlled Ventilation, J. Thor. Cardio. Surg. 52: 207 (Aug.) 1966.*)

**BLOOD GASES** The difference between blood gases of cutaneous and arterial blood is insignificant in normothermia. In 20 patients during hypothermia (rectal temperatures between 20 and 33° C.) pH, carbon dioxide tension, standard bicarbonate base excess and buffer base in cutaneous and arterial blood were quite similar. Their results show that for clinical use in hypothermia the cutaneous blood may be regarded as representative for arterial blood. (*Stoll, W., and Hossli, C.: Measurement of pH, P<sub>CO<sub>2</sub></sub>, Standard Bicarbonate, Base Excess and Buffer Base in Cutaneous Blood by the Micro Astrup Method during Hypothermia, der Anaesthetist 15: 223 (July) 1966.*)

**VENOUS BLOOD GAS TENSIONS** Blood samples from a central vein provide a reliable indication of blood pH and carbon dioxide tension when compared with arterial blood gas values. Technical ease without the risks of arterial puncture makes this an attractive technique for monitoring acid-base changes in critically ill patients. A total of 101 pairs of samples of arterial and central venous blood were obtained from 32 patients, 29 in circulatory shock. A high correlation was obtained between the central venous and arterial values for pH ( $r = 0.978$ ) and P<sub>CO<sub>2</sub></sub> ( $r = 0.962$ ). Thus, in addition to its other important functions, the central venous catheter is recommended as a convenient and reliable source of blood for repetitive measurement of pH and P<sub>CO<sub>2</sub></sub> in critically ill patients. (*Zahn, R., and Weil, M.: Central Venous Blood for Monitoring pH and P<sub>CO<sub>2</sub></sub> in the Critically Ill Patient, J. Thor. Cardio. Surg. 52: 105 (July) 1966.*)

**RESUSCITATION** A large cart, named MAX, has been designed to incorporate the items needed for resuscitation. The patient is placed on the cart and can be moved without interrupting resuscitation. The cart provides completeness, reliability, simplicity of operation, and mechanical aids, as well as recording facilities for later analysis of data. (*Nobel, J. J.: Mobile Emergency Life Support and Resuscitation System, Arch. Surg. 92: 879 (June) 1966.*)