

doses of atropine sulfate, ranging from 0.5 to 2.0 mg. Effective inhibition of the salivary reflex and vagal blockade were observed after doses of 2.0 mg. of atropine sulfate per 70 kg. of body weight. Doses of 0.5 mg. per 70 kg. were almost completely ineffective. Doses of 1.0 mg. per 70 kg. caused about 50 per cent inhibition of reflex parotid secretion which lasted not longer than about 45 minutes. (Stewart, W. C., and Currie, H.: *Relationship Between Dosage of Atropine and Effects on Reflex Parotid Secretion and Heart Rate in Man, Canad. Med. Ass. J.* 85: 780 (Sept. 30) 1961.)

ANALGESICS On comparing the analgesic efficacy of meperidine (Demerol) and phenazocine (Prinadol) in obstetrical patients, no statistically significant difference was found. Phenazocine caused less nausea and vomiting. (Corbit, J. D., and First, S. E.: *Clinical Comparison of Phenazocine and Meperidine in Obstetric Analgesia, Obstet. Gynec.* 18: 488 (Oct.) 1961.)

OXYGEN TOXICITY The demonstration of the efficacy of tris(hydroxymethyl) amino-methane ('tris') in buffering tissue carbon dioxide and acidity suggested that it might provide protection against the toxic action of oxygen at high pressures. Rats administered 'tris' before exposure to oxygen at high pressures demonstrated that protection was provided. The onset of oxygen seizures was postponed and their incidence and severity decreased. Lung damage was either absent or much less severe than in control animals. Lung weight was lower and the mortality rate much decreased. The results not only demonstrated the protection provided by 'tris,' but redirected attention to increased tissue carbon dioxide tension and tissue acidity as possible contributors to the precipitation of the toxic reaction to oxygen at high pressures. (Bean, J. W.: *Tris Buffer, Carbon Dioxide and Sympatho-adrenal System in Reactions to Oxygen at High Pressures, Amer. J. Physiol.* 201: 737 (Oct.) 1961.)

ANALGESIA POTENTIATION In the study of the efficacy of giving an ataractic drug in addition to an analgesic drug for relief

from the discomfort of parturition, a phenothiazine derivative (promethazine) and a benzozquinolizine derivative (Nitomar) were compared with each other and with meperidine alone. The employment of a tranquilizer in addition to meperidine was significantly more effective than meperidine alone in decreasing the patient's pain or anxiety responses. (From Hagen, C., and Carswell, A. P.: *Potential Analgesia During Labor: Study of Two Tranquilizers, Obstet. Gynec.* 18: 483 (Oct.) 1961.)

ANTIEMETIC Sixty-one patients developed nausea and vomiting after a variety of operations under barbiturate-cyclopropane-nitrous oxide-oxygen anesthesia. They were treated with intravenous administration of 200 mg. trimethobenzamide (Tigan). Eighty-five per cent had complete relief in one to ten minutes, average four minutes. Duration of relief was five hours. Blood pressure, pulse, and respiration were unchanged. (Kolodny, A. L., and Shane, S.: *Trimethobenzamide, A. M. A. Arch. Surg.* 83: 775 (Nov.) 1961.)

HYPOTHERMIA A marked reduction in the flow of pancreatic secretions takes place in dogs under hypothermia of 34 to 28° C. Complete cessation of flow takes place at 28° C. A moderate decrease in the enzyme concentration in the serum and pancreatic juice also is seen during hypothermia. (Symbat, P. S., and others: *Influence of Hypothermia on Pancreatic Function, Ann. Surg.* 154: 506 (Oct.) 1961.)

HYPOTHERMIA Hypothermia from 14 to 28° C. in dogs produced a metabolic acidosis with excess lactate due to hypoxic metabolism. There was a fall in pH with the P_{CO_2} low or normal. The metabolic acidosis was not due to decrease in cardiac output or to arterial oxygen unsaturation. During warming, there was a further drop in pH and a rise in P_{CO_2} owing to increased carbon dioxide production. At the same time, excess lactate fell. Employing a special animal preparation, it was shown that the metabolic acidosis of hypothermia results from different rates of cooling of various parts of the body. (Ballinger, W. F., and others: *Acidosis of Hypothermia, Ann. Surg.* 154: 517 (Oct.) 1961.)