J. A. M. A. 166: 1138 (Mar. 22) 1958.) (An unusually fine and complete survey of the subject of tranquilizers which should be basic in an anesthesiologist's file.—*Reviewer.*)

CHLORPROMAZINE POISONING A case of acute chlorpromazine poisoning with resultant hypotension and respiratory depression responded to intravenous nalorphine. (*Sacks, N. Z: Acute Chlorpromazine Poisoning, Lancet, 2: 983 (Nov. 16) 1957.*)

ANTIHISTAMINES Sensitization to the cardio-accelerator action of adrenaline and noradrenaline by five antihistamines was examined on the acutely denervated heart of the cat. Antazoline (Antistin), chlorcyclizine and promethazine (Phenergan) increased cardio-accelerator response to both amines equally. Mepyramine (Anthisan) increased noradrenaline more than adrenaline action. Diphenhydramine (Benadryl) potentiated the responses to noradrenaline but not to adrenaline in a manner similar to that of cocaine and chronic denervation. Potentiating activity of the drugs was not related to their antihistamine potency or local anesthetic activity. (*Innes, I. R.: Sensitization of Heart and Nictitating Membrane of Cat to Sympathomimetic Amines by Antihistamine Drugs, Brit. J. Pharmacol. 13: 6 (Mar.) 1958.*)

SYNAPTIC TRANSMISSION Trimethadione (Tridione) administered to cats produced synaptic depression leading to a marked decrease in nervous transmission during repetitive stimulation. This was due to the action of the drug at a presynaptic site. All of the effects of a barbiturate were completely antagonized by appropriate doses of pentylenetetrazol (Metrazol). Conversely, the excitant effects of pentylenetetrazol could be completely antagonized by the barbiturates. (*Esplin, D. W., and Curto, E. M.: Effects of Trimethadione on Synaptic Transmission in Spinal Cord; Antagonism of Trimethadione and Pentylenetetrazol, J. Pharmacol. & Exper. Therap. 121: 457 (Dec.) 1957.*)

CORTICOSTEROID THERAPY Operative and postoperative complications were minimal during thirty-six operations done during long term treatment with either adrenocortical hormones or corticotropin. Operations during long-term treatment with adrenocortical hormones carry no increased risk of complications, provided there are no gross signs of overdosage with the hormones, and the administration of the hormones is not interrupted. (*Popert, A. J., and Davis, P. S.: Surgery During Long-Term Treatment with Adrenocortical Hormones, Lancet 1: 21 (Jan. 4) 1958.*)

ADRENAL ATROPHY Following prolonged parenteral administration to rats, prednisolone and hydrocortisone caused more adrenal atrophy than did prednisone. (*Hodges, J. R., and Vernikos, J.: Comparison of Pituitary Inhibitory Effects of Prednisone, Prednisolone, and Hydrocortisone, Brit, J. Pharmacol. 13: 98 (March) 1958.*)

NEOMYCIN PARALYSIS Neomycin given intravenously produced neuromuscular blockade in rabbits with one-tenth to one-twentieth the dose when the animal was anesthetized with ether. In dogs, neostigmine antagonized the ether-neomycin neuromuscular blockade. These studies suggest that reports of apnea following neomycin instillation in the peritoneum is due to the neuromuscular blocking activity of the neomycin. (*Pittinger, C. B., and others: Danger of Intra-peritoneal Neomycin During Ether Anesthesia, Surgery 43: 445 (Mar.) 1958.*)

STREPTOMYCIN Streptomycin injected intravenously in dose of 110 mg./Kg. abolished or diminished the amplitude of the contractions of some dogs' tibialis anticus when stimulated indirectly. This was interpreted as a neuromuscular blockade since it was abolished by neostigmine. (*Brazil, O. V., and Corrado, A. P.: Curariform Action of Streptomycin, J. Pharmacol. & Exper. Therap. 102: 452 (Aug.) 1957.*)

OPIOIDS Synthetic morphine-like compounds are called opioids. Those available for clinical use are meperidine, methadone, alphaprodine, levorphanol, anileridine, ethoheptazine, and darvon. All have their advantages, disadvantages and limitations. The narcotic antagonists of

clinical importance are N-allylnorcodeine, N-allylnormorphine (nalline), and levallorphan. Dose, effective routes of administration and significant effects of the opioids and their antagonists are presented. (*Schiffrin, M. J., and Sadove, M.: Synthetic Narcotic Analgesics and Their Antagonists, GP 17: 106 (Feb.) 1958.*)

LEVALLORPHAN The narcotic antagonist levallorphan (Lorfan) tartrate was used in combination with meperidine hydrochloride (in 1:100 ratio) for supplementation of nitrous oxide-oxygen-thiopental anesthesia, and the results in a series thus managed were compared with those in a control series employing meperidine alone as the supplemental agent. The levallorphan-meperidine combination made possible the use of larger doses of meperidine and hence a decrease in thiopental requirements. However, the reactivity of the patients at termination of surgery was approximately the same in both series. If one aims at rapid recovery from anesthesia, the combination of levallorphan with alphaprodine (Nisentil) hydrochloride is preferable to that of levallorphan-meperidine. (*Foldes, F. F., and Ergin, K. H.: Levallorphan and Meperidine in Anesthesia, J. A. M. A. 166: 1453 (March 22) 1958.*)

ANALEPTIC Fifty-two consecutive patients, ranging in age from 7 to 84 years, were anesthetized for operation with nitrous oxide-oxygen and supplemental doses of barbiturate. At the completion of the procedure, ethyl-methylglutarimide (Megimide) was administered in 0.5 per cent solution. The observations made by the authors leaves no doubt in their minds that ethyl-methylglutarimide is an effective, safe, and clinically useful antidote to barbiturates employed as anesthetic agents. The analeptic produced an increase in pulmonary ventilation and a return of corneal and all pharyngeal reflexes. Recovery of consciousness, however, was more delayed. The only undesirable side effects noted were restlessness in 3 cases for which intravenous barbiturate was required. (*Frayworth, E., and Wyke, B. D.: Use of Bemegride in Terminating Barbiturate Anaesthesia, Lancet 2: 1025 (Nov. 23) 1957.*)

POSTOPERATIVE ANALGESIA In order to collect objective data on the use of narcotic analgesics in the immediate postoperative period, 160 patients who required a narcotic for the relief of pain while in the recovery room were studied by the "double-blind" technique. Meperidine 25 mg. intramuscularly provided as much analgesia as did 50 mg. during the first hour after administration of the narcotic, but even the 25 mg. dose produced a depression of the respiratory minute volume which, although slight, was nevertheless statistically significant. The simultaneous administration of levallorphan with meperidine reduced the respiratory depression without interfering with analgesia, the optimal ratios of meperidine to levallorphan being 100:1 or 80:1 (by weight). (*Sadove, M. S., and others: Use of Meperidine and Meperidine-Levallorphan Mixtures in Recovery Room. J. A. M. A. 166: 1432 (Mar. 22) 1958.*)

TEMPERATURE REGULATION The mechanism by which a healthy man regulates his body temperature is outlined and discussed. The problems of hypothermia and of hyperthermia are discussed. The evidence appears strong that sometimes, at least, fever in man is due to the release of a substance from leucocytes which acts as an endogenous pyrogen. (*Pickering, G.: Regulation of Body Temperature in Health and Disease, Lancet 1: 1 (Jan. 4) 1958, and Lancet 1: 59 (Jan. 11) 1958.*)

TRACHEAL RESECTION Tracheal resection for stricture was performed on two adult patients under general anesthesia. A transverse incision in the neck was used. When the trachea was divided, the oral endotracheal tube was removed and a small tube inserted into the distal segment of the trachea; during this period the surgeon inserted the stitches in the posterior wall of the segments; the small tube was then removed, the oral endotracheal tube reinserted. The stitches in the posterior wall were tied and an anterior row of stitches inserted and tied. Tracheotomy was not performed and wound healing was uneventful. (*Forster, E., and others: Resection of Trachea; End to End Anastomosis. Report of Two Cases, Poumon et Coeur 13: 367 (April) 1957.*)