in 1929, by Zerfas; nembutal in 1931, by Lundy. Weese and Scharpff, in 1932, introduced evipan and in the same year Lundy introduced pentothal sodium.

Pentothal sodium is used in solution, usually in concentration of 2.5 per cent or 5.0 per cent. Induction of anesthesia is rapid and without excitement. The blood pressure may fall if the drug is given rapidly. Respiration is depressed; slow injection, however, rarely causes cessation of respiration. Laryngospasm may occur in early stages of anesthesia. The stages of anesthesia are produced rapidly and merge one into the other. Preliminary medication may be omitted in an out-patient. Atropine is useful in preventing the tendency to laryngeal spasm. The stomach, bowel and bladder should be empty.

The solution of pentothal sodium may be given by intermittent or continuous intravenous injection. A free airway and adequate oxygenation as well as provision for the relief of respiratory or cardiac failure must be included in the correct technic for administration of pentothal sodium. Correct selection of cases and slow, intermittent injection add to the safety of the method. The greatest danger is the ease with which pentothal may be administered. 6 references.

F. A. M.


A number of new analgesic agents prepared by German chemists possess marked pharmacologic properties. One of these, German serial No. 10820, has been reported. Six compounds, 10820, 10446, 10582, 10581, 10819, and 10720 have been studied and compared to demerol.

 Analgesic action was determined in rats by the method of Haffner and in dogs and man by thermal radiation technic. All six compounds were found to be more active analgesically when results in rats, dogs and men are compared. Demerol is identical with 10446 except that it has no OH-group in the metaposition of the benzene ring. The addition of this OII-group increases the analgesic action of demerol. The ketone form (10720) is more potent than the ester form (10446). Acute toxicity and analgesic potency parallel each other but the relationship is not exact.

Considerable and prolonged fall of blood pressure in anesthetized dogs followed injection of the drugs with the exception of (10720). Respiratory stimulation resulted from administration of the esters, whereas depression occurred with the ketones. Inhibition of salivary secretion approaching that caused by atropine was noted with the esters but the ketones showed much less effect. With the doses studied mild side reactions, such as lightheadedness, occurred. Nausea and vomiting were relatively rare. Compound 10726 caused such severe vomiting that is was not tested in man. 3 references.

F. A. M.


The anesthetist must assume the role of fire prevention officer in preventing the ever-present danger of fires and explosions in operating rooms. Intelligent common sense by everyone in the operating room is imperative. Smoking, striking of matches, use of cautery, careless use of electric switches, woolen clothes or blankets in the operating section should all be avoided. The Horton intercoupler should be in constant use when explosive or inflammable anesthetics are in use.
Abstracts

Local analgesic drugs, either from overdose or hypersensitivity may produce clonic muscle spasms or generalized convulsions. An intravenous barbiturate, sufficient to relax the muscles is considered the best antidote. Fall in blood pressure during spinal anesthesia may result in secondary hemorrhages. Constant blood pressure control is essential during spinal anesthesia.

Intravenous anesthesia may be made safer by the general rule "the weaker, the safer." Over-premedication, expecting full relaxation, perivascular or intra-arterial injection, and administration of intravenous anesthesia without all safety devices at hand, are some of the hazards of the method.

Every patient under general anesthesia deserves an artificial airway. Every anesthetist should master the technic of endotracheal intubation. Intravenous fluids, blood, plasma and saline-dextrose solutions, should be available for immediate use. Vasopressor drugs should be ready for use when necessary. Curare may be classified as one of the safety agents in the modern anesthetist's armamentarium.

Suction as a safety measure cannot be overestimated. Mechanical augmentation of shallow or slow respirations has largely replaced the older methods of chest compression and withdrawal of the anesthetic.

Cardiac arrest differs from failing circulation and is treated by such emergency measures as support of the respiration, cardiac puncture, cardiac massage and injection of adrenaline or other similar drugs into the cavity of the left ventricle.

Postanesthesia care begins in the operating room when the anesthetist takes steps to revive the patient as much as he can. Suction of the mouth and trachea if indicated, suitable artificial airway and ensuring that no depression or collapse exists, are some of the immediate steps in postanesthesia care. Nurses on the ward should be instructed in proper care of the unconscious or semi-conscious patients. A recovery section is the very best answer to the problem of immediate postanesthetic care. The anesthetist, in addition to his other duties, should be safety adviser to the staff and hospital. 7 references.

F. A. M.


This article presents a different concept of fluid intake for patients in heart failure. The patients, all in congestive failure, were assigned by rotation to one of three treatment regimes. Drugs, diet, and bed rest were kept as constant as possible. The only variable was the fluid intake.

The diet was acid ash, salt poor. This diet prevents neutralization of injected acidifying diuretics and metabolic acids which mobilize already stored sodium. Since the sodium intake was limited there was no need to restrict fluid intake, and as a result the patients felt more comfortable. Salt depletion was not observed. This was thought to be due to the regulatory mechanism of the kidney and sweat glands which preserves electrolyte balance.

Therapy in congestive failure, besides the above mentioned diet included bed rest, dieuretics, sedatives and a digitalis preparation.

The rationale for forcing fluids is that cardiac failure reflects itself upon the kidneys by impairing their function. Therefore more fluid is needed to eliminate normal waste products. The amount of water should be sufficient to allow excretion of waste products without having the kidneys work at maximum capacity.