"The principle upon which the ice treatment is based is not a freezing process but one of chilling the protoplasm. When the temperature of the tissue is brought down to between 35 and 40 degrees Fahrenheit the activity of all protoplasm is inhibited. . . . We are very enthusiastic about this method, for in my thirty years of practice about 98 per cent of our diabetics died following amputation, whereas now, with the anesthesia of protoplasm, 98 per cent are living, and the two first cases have been wearing artificial legs for over eighteen months."

J. C. M. C.

FAULKNER, R. L., AND RIEMENSCHNEIDER, E. A.: *Postoperative Care and Complications of Gynecological Patients.* Ohio State M. J. **40**: 639–642 (July) 1944.

"Morphine and plenty of it is the general practice following pelvic operation. . . . It is well to remember that morphine may prolong the period of nausea in some patients and these should be given pantopon or dilaudid which may be better tolerated. After three or four days codein may be utilized. A milder sedative or hypnotic at bed time may decrease somewhat the amount of narcotic needed. . . . In pelvic surgery there should rarely be serious shock without excessive loss of blood since operations in the lower abdomen are generally well tolerated. . . . Atelectasis is usually the earliest pulmonary complication following operation. . . . Postoperative pneumonia is essentially the same as pneumonia affecting the patient at any other time."

J. C. M. C.

LENAHAN, N. E.: *New Methods of Anesthesia and Their Application in Office Practice.* Ohio State M. J. **40**: 643–649 (July) 1944.

"Many times anesthesia of a part or area is required and no available anesthetist or anesthetic equipment is available. In this case the blocking of the nerve or infiltrating the area with novocaine or related compounds proves very effective." 5 references.

J. C. M. C.

WHITE, C. S.: *Demerol—a Substitute for Morphine in Surgical Practice.* Virginia M. Monthly **71**: 351–353 (July) 1944.

"We have been using Demerol in a surgical practice for more than a year. . . . For the relief of pain, particularly of a spasmodic character, such as renal or biliary colic, it is a very satisfactory substitute for morphine. The dose has been 100 mg. hypodermically or intramuscularly. . . . Demerol does not induce sleep, but sleep frequently follows the relief of pain. Following operation, it is given every three or four hours during the first 24 hours, its administration being left to the discretion of the nurse—then about twice in the next 24 hours. Thereafter, mild sedatives are substituted and usually suffice. We have found Demerol particularly useful in those patients who tolerate morphine poorly or have an idiosyncrasy for the drug. . . . We have not seen the depression in respiration, cyanosis, pruritis or excitation which is occasionally noted after the administration of morphine following the use of Demerol, possibly because we have been satisfied with a conservative dosage. Our experience is limited almost exclusively to surgical cases. In about fifty cases in which it was used as a part of the preparation for a general anesthetic, it seemed to relax the patient but did not produce narcosis to any degree. Combined with one of the barbiturates, seconal for instance, it formed a most satisfactory substitute for morphine and atropine, and we believe it can be relied upon to eliminate the excitation

and nausea that sometimes follows the initial dose of morphine." 5 references.

J. C. M. C.

BEYER, K. H., AND LATVEN, A. R.: *An Evaluation of the Influence of Succinate and Malonate on Barbiturate Hypnosis.* J. Pharmacol. & Exper. Therap. **81**: 203–208 (June) 1944.

"The ability of the brain to oxidize glucose, lactate and pyruvate in vitro has been shown to be inhibited markedly by certain barbituric acid derivatives. . . . It seems well established . . . that barbiturates do inhibit respiration of the brain cortex to an extent more or less consistent with their potency as hypnotics. . . . It remained for Soskin and Taubenhaus to reason, since barbiturates did not inhibit the oxidization of succinate, that 'by supplying sufficient of the latter substrate (succinate) one might adequately maintain the metabolism of the brain of a poisoned animal until the barbiturate had been destroyed or excreted.' The results of their experimentation substantiated their hypothesis. This correlation of information concerning the effects of compounds on intermediary cellular metabolism with the observed pharmacodynamic action of barbiturates apparently served at once to demonstrate the practicality of this approach to such a problem and to stimulate interest in sodium succinate as an antidote for barbiturate poisoning. The purpose of the work presented in this paper was to evaluate in another laboratory the effectiveness of succinate therapy in shortening the duration of barbiturate hypnosis. . . . Sodium malonate and glutamate, as administered in these experiments, were without effect on the duration of pentobarbital hypnosis in mice or rats. We were able to confirm the observation that pentobarbital did not inhibit the in vitro oxidation of succinate by the succinoxidase system. Though it was found that the intramuscular administration of sodium succinate to mice and rats moderately diminished the duration of pentobarbital hypnosis, this succinate-barbiturate antagonism was not nearly as great on a dosage basis as has been reported previously." 6 references.

J. C. M. C.

ORTH, O. S.; STUTZMAN, J. W., AND MEEK, W. J.: *Relationship of Chemical Structure of Sympathomimetic Amines to Ventricular Tachycardia during Cyclopropane Anesthesia.* J. Pharmacol. & Exper. Therap. **81**: 197–202 (June) 1944.

"In previous studies with comparable pressor dosages of eleven sympathomimetic amines, the five primary and secondary amines with a catechol nucleus caused ventricular tachycardia during cyclopropane anesthesia, and the one tertiary amine with a catechol nucleus did not. Further studies have been made as 15 additional amines have become available. Tests of the present drugs have confirmed the conclusion that a catechol nucleus and also a primary or secondary amine group are necessary for the production of ventricular tachycardia by drugs in the dog during cyclopropane anesthesia. . . . Dogs served as the test animal. . . . In a dosage producing a blood-pressure rise equal to that caused by 0.01 mg. of adrenalin per kilogram, the six primary and secondary amines with a catechol nucleus consistently elicited ventricular tachycardia. Tertiary amines with a catechol nucleus and the other amines used did not cause this irregularity." 7 references.

J. C. M. C.

SIEVER, JAMES M.: *Continuous Caudal Anesthesia: Analysis of 1,200 Cases with Comparison of Methods.* J.A.M.A. **125**: 327–332 (June 3) 1944.