

*Inadvertent Injection of Sodium Pentothal into an Artery.* Bull. U. S. Army Med. Dept. No. 86: 32 (March) 1945.

"Although the inadvertent injection of sodium pentothal into an artery has not been recorded by medical officers of the U. S. Army, a few instances of this error have been observed by the British. The following note of warning, extracted from a British report, should interest medical officers whose duties include the performance of venipuncture for the administration of this anesthetic agent:

"Inadvertent injection of pentothal into an artery has more than once given rise to gangrene of the hand and fingers. The mistake may occur in one of two ways:

"(a) An aberrant ulnar artery running between skin and fascia may be mistaken for a vein.

"(b) During the search for a vein in the plump antecubital fossa the needle may pass too deeply and enter the brachial artery.

"To obviate such a serious mistake, it is recommended that (1) the color of the blood should be carefully observed before injection starts; (2) a pause of a few seconds should be made after injection of a minute quantity of pentothal. If no pain occurs, it may be assumed that an artery has not been penetrated."

A. W. F.

PFEIFFER, D. B., AND PATTERSON, F. M. S.: *Refrigeration Anesthesia in Surgical Procedures.* Pennsylvania M. J. 48: 349-352 (Jan.) 1945.

"Since 1942 we have performed 9 amputations through the lower part of the thigh in diabetics under refrigeration anesthesia with one death, giving a mortality rate of 11.1 per cent. This death occurred two weeks after operation, and postmortem examination re-

vealed that a pulmonary embolus had formed. Our mortality rate in diabetic limb amputations from 1937 to 1942 had been 28.5 per cent. . . .

"Refrigeration anesthesia is of inestimable value in the treatment of gangrene secondary to arteriosclerosis or to any peripheral vascular disease. . . . Many patients with gangrene and infection of the extremities do poorly under all forms of treatment. Septicemia with impending death frequently occurs. These patients are usually in too poor a condition for an surgical procedure to be performed no matter what anesthetic agent is employed. Here refrigeration may be a life-saving procedure. . . . In some cases the general condition may be improved simply by the application of ice that conservative surgery may be made possible. In these cases a tourniquet should not be applied. . . .

"Patients with badly crushed extremities are often in severe shock due to blood loss and absorption of toxic products from the mangled areas. When amputation is inevitable, a tourniquet should be applied immediately and the limb encased in ice. The shock is immediately retarded. The general condition of the patient may then be improved by plasma transfusion, parenteral fluids, and other shock combating measures. Later, when the patient is in suitable condition, amputation may be performed without shock or the use of any further anesthetic agent. . . .

"Temple Fay was a pioneer in advocating reduced temperatures in the treatment of burns. . . . According to Fay, the advantages of the use of ice in the treatment of burns are:

1. Pain is controlled.
2. Infection is prevented.
3. Shock is diminished.
4. Serum loss is decreased.
5. Toxic absorption is diminished.