

the patients remained mentally alert until a few minutes before death, and appeared to gain little relief of pain from subcutaneous morphine: perhaps with a poor circulation intravenous administration would be preferable. The results obtained in these cases therefore indicate that replacement of fluid is not sufficient by itself to overcome severe shock." 3 references.

J. C. M. C.

OGUS, W. I.: *Vinethene: a Suitable Anesthetic for War Surgery*. Mil. Surgeon **88**: 301-306 (March) 1941.

"Due to portability, ease and convenience of administration, rapidity of action, and usefulness in emergency surgery, Vinethene is recommended as an anesthetic agent for war surgery."

J. C. M. C.

ALLEN, J. G., AND LIVINGSTONE, H.: *Postoperative Hypoprothrombinemia and Anesthesia*. Arch Surg. **42**: 522-528 (March) 1941.

"Prothrombin studies were made on 106 patients who underwent surgical procedures exclusive of operations on the biliary tract. Except in 1 case, no change was found in the prothrombin levels following these procedures when ether, vinethene, nitrogen monoxide, ethylene-oxygen, avertin with amylene hydrate, nupercaine, spinal, or local anesthesia was used. Loss of blood encountered at operation was determined on 11 patients who underwent surgical procedures other than operations on the biliary tract. As much as 785 cc. of blood was lost without reducing the level of plasma prothrombin. Thirteen patients with obstructive jaundice and 2 patients with bile fis-

tulas received preoperative vitamin K therapy for correction of prothrombin deficiency; in all but 2 of these patients, however, a sharp drop in prothrombin occurred during the postoperative period despite the correction of the initial prothrombin deficiency. The suggestion is made that some form of storage of vitamin K or prothrombin probably occurs within the body and that the failure to replenish this store in the patient with obstructive jaundice or biliary fistula probably accounts for the postoperative hypoprothrombinemia seen in such patients." 8 references.

J. C. M. C.

CARMICHAEL, E. B., AND THOMPSON, W. D.: *Effect of Repeated Administration of Delvinal Sodium [5-ethyl-5-(1-methyl-1-butenyl) barbituric acid] to Guinea Pigs*. Proc. Soc. Exper. Biol. & Med. **46**: 233-235 (Feb.) 1941.

"In this paper, we wish to present the results of repeated intraperitoneal injections of delvinal sodium into 16 normal young guinea pigs. . . . Guinea pigs were found to show a tolerance to delvinal sodium [5-ethyl-5-(1-methyl-1-butenyl) barbituric acid] on repeated administration of large doses of the drug. The average length of sleep dropped from 127.3 to 48.2 minutes following 8 semi-weekly injections of the drug, while the average length of hypnosis dropped from 191.9 to 104.1 minutes. The average weight of the guinea pigs increased from 250 to 380 g., which was more than a 50 per cent increase in weight." 4 references.

J. C. M. C.