sional postoperative restlessness which can be controlled by a small injection of morphine (gr. 1/6) immediately after the operation. This is the more advisable as chloral is not an analgesic. Our experience with chloralhydrate leads us to believe that it deserves to be used more widely as premedication. . . . In about 160 cases—chloralhydrate with atropine proved to be a safe and satisfactory preoperative medication. . . . The effect of chloralhydrate on the blood-pressure has been more closely studied and found to be far short of the danger line." 14 references.

J. C. M. C.

HIMMELSBACH, C. K.: *Further Studies of the Addiction Liability of Demerol (1-methyl-4-phenyl-piperidine-4-carboxylic acid ethyl ester hydrochloride).* J. Pharmacol. & Exper. Therap. **79**: 5–9 (Sept.) 1943.

"Demerol possesses the liability of producing physical dependence similar to that caused by morphine. . . . In clinical doses the addiction liability of Demerol is less than that of morphine. . . . As an addiction preventive measure, caution and restrictions similar to those involved in the clinical use of morphine should be applied to Demerol." 8 references.

J. C. M. C.

FORBES, J. C., AND EVANS, E. I.: *Protective Action of Sulfanilamide Against Hepatic Damage from Chloroform Inhalation.* War Med. **4**: 418–421 (Oct.) 1943.

"The exigencies of modern warfare often require the use of materials and methods in medical practice which are not altogether those that one would choose in a more leisurely civilian practice. This is particularly true in the case of anesthetic agents and methods. Most such agents now available for civilian use are somewhat bulky and require more or less elaborate apparatus for their administration. It is particularly for these reasons that chloroform is being used to such a great extent as an anesthetic by certain armies at the present time. . . . Chloroform fulfils many of the requirements of an anesthetic for use during battle action, by Navy medical groups. However, experience in the past has shown that, although it possesses some of the characteristics of the ideal anesthetic agent, it unfortunately in a certain percentage of cases seems to produce definite secondary damage to the liver. . . . Since the chief purpose of the investigation was to determine whether sulfanilamide exerts any protective action against the damage to the liver from chloroform, it was decided to kill the animals [rats] about twenty-four hours after the time of acute poisoning and examine the liver histologically. . . . Since many of the rats anesthetized with chloroform apparently died of causes other than hepatic damage, it was decided to study rabbits in the hope that this complication could be avoided. . . .

"Only in [one] experiment . . . did a treated animal show hepatic damage comparable to that of the least affected corresponding control animal. . . . With the increasing local use of sulfanilamide powder in wounds received in combat, it does not appear that a recommendation that sulfanilamide (or other sulfonamide compound) be given preoperatively to wounded men who are to be anesthetized with chloroform is out of order. . . . It would seem wise to give the sulfanilamide soon enough so that a 'therapeutic' level of the drug will be attained in the blood stream and liver before the chloroform is administered. The interval may be very short with sulfanilamide because of its rapid absorption, but it may have to be prolonged if one of the less soluble