(200–600 mg.), methemoglobin levels of 1 g./100 ml. or greater would rarely be achieved. Thus, under usual clinical conditions, it is unlikely that the methemoglobinemia produced as a result of the injection of propitocaine would be of significance. However, in patients with anemia, or with cardiac failure in whom the availability of oxygen has already been decreased, the potential disadvantage of further hypoxic embarrassment due to the use of large doses of this agent must be carefully considered. For example, in doses of 900 mg. or greater, we observed a methemoglobin value of 2.7 g./100 ml., and Scott reported a methemoglobin value of 3.4 g./100 ml. Despite the occurrence of such high levels of methemoglobinemia, neither Scott [6] nor ourselves observed clinical symptoms of hypoxia. Except for the cyanotic-like appearance of the patients, these individuals did not demonstrate change in blood pressure, heart rate, or respiration. It would appear that in normal individuals, even the use of excessive amounts of propitocaine would be well tolerated. Drug-induced methemoglobinemia is readily reversible. Our data revealed that methemoglobin levels began to regress spontaneously 2–3 hours following the administration of propitocaine. In addition, Scott has shown that propitocaine-induced methemoglobinemia can be quickly reversed by the administration of methylene blue.[6] It is apparent from our studies as well as those of others, at the present time, that clinically significant methemoglobinemia does not occur except following excessive doses of propitocaine. Therefore, the production of methemoglobin should not be considered as a serious contraindication to the use of propitocaine as a conduction anesthesia agent.

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Amitriptyline (Elavil) as an Agent for Premedication

GERALD D. ALLEN, M.D., AND J. J. BONICA, M.D.*

Amitriptyline possesses tranquilizing, antidepressant and anticholinergic properties.[1] The hypnotic effects of this drug were confirmed by Dobkin and associates,[2] who also demonstrated that in the adult dose range of 20 mg., given intravenously, little hypotension resulted from its administration. It was therefore decided to investigate the properties of amitriptyline when used for premedication.

* Department of Anesthesiology, University of Washington, School of Medicine, Seattle, Washington.

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A preliminary study indicated that the average optimum preoperative sedative dose of amitriptyline for adult patients was 10 mg. intramuscularly one hour before operation. Of 155 patients studied initially, 55 were given amitriptyline 10 mg., 52 meperidine 50 mg. and 48 received pentobarbital 50 mg. as premedication. Analysis of the results indicated that amitriptyline relieved anxiety and apprehension without producing hypotension or hypnosis.

A double-blind study was then instituted to compare amitriptyline 10 mg., pentobarbital

50 mg. and a placebo (normal saline), each in combination with atropine 0.4 mg. Only adult patients scheduled for general surgical procedures were used in the study. Of these 311 patients, 100 received the placebo, 105 amitriptyline, and 106 were given pentobarbital. Drug combinations, given by random selection, were administered intramuscularly one hour prior to induction of anesthesia. The effects were noted by a trained observer, who followed each patient throughout the operative and postoperative periods. The effect of the premedication was assessed as; (1) sleep, (2) sedated but responsive, (3) relaxed, awake and cooperative, (4) anxious and apprehensive. Direct questions were not used in the determination of the degree of sedation. Side effects noted for each of the three drug categories were: excessive secretions in a single case in each of the amitriptyline and pentobarbital groups, and; vomiting (preoperative) in two patients who were given placebo, and in one patient in the pentobarbital and amitriptyline groups. No significant hypotension was observed either preoperatively or during operation.

Statistical analysis of the results of this double-blind study showed that amitriptyline 10 mg. was equivalent to 50 mg. of pentobarbital as a hypnotic when used for premedication. No significant differences were found in the effects produced by amitriptyline as related to type of anesthesia, sex, race, age, and physical status. The original impression that amitriptyline was an agent which would relieve anxiety and apprehension without hypnosis was not confirmed.

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GADGETS

Shoe-Tester Unlocks the Door

Herman Slass, M.D., James Marin, M.D., Eddy U. Charles, B.S.E.E.*

Among the numerous precautions normally observed in the operating room to prevent anesthetic fires and explosions, the one most difficult to control is the conductivity of personnel entering the operating room suite. Regardless of the method used to insure conductivity, correct and conscientious testing is most essential but is also most likely to be either neglected or improperly performed.

In order to minimize this hazard we have adapted an ordinary shoe tester to the circuit of an electrically controlled door lock, thus making entrance into the operating suite dependent on being conductive.

By modifying the internal wiring of a conventional shoe tester (Lite-Rite, manufactured by W. E. Anderson, Inc., Kansas City, Missouri), a relay was constructed containing a coil which is energized by closing the circuit of the conductometer. The relay has a normally open contactor which acts as a switch through which a low voltage current is supplied to the electric door lock release.

If the individual testing himself is properly conductive, the conductometer circuit is closed, the relay coil is energized and the contactor closes, permitting activation of the door opening mechanism.

The opener buzzes and the individual can then admit himself to the operating room suite. A test circuit has been included consisting of a normally open, momentary contact push button wired in the 24 volt circuit. In the event of

* Parkway Hospital, Forest Hills, New York.