ABSTRACTS

be unsuitable for seriously wounded patients. It may be used, however, if there is no hemorrhage in good risk patients with wounds of the rectum or in older injuries after circulatory adjustment has been made. 4 references.

F. A. M.


Much progress has been made in the investigation of vaso-motor spasm in the limbs since Leriche's paper in 1921 on the sympathetic enervation of the limbs. The author confines his discussion to the lower limbs. A review of the anatomy relevant to the subject precedes the discussion of clinical material. Since the cutaneous sensation in the feet is supplied from the third, fourth and fifth lumbar and the first and second sacral roots, the author finds it impossible to believe that a low spinal can be relied upon to block the sympathetic nerves to the lower limbs.

The writer has used a block of all segments up to the fourth dorsal without using a preliminary sedative and without using analeptic drugs. In all cases where a skin temperature elevation was obtained, lumbar sympathectomy later proved efficacious. Sedatives, anesthetics or natural sleep will effect a temporary sympathetic release which will give a rise of skin temperature. For that reason sedatives are omitted before the blocks. Analeptics are omitted in order that the full effect of paralyses of the sympathetic nerves may be observed. The temperatures of the feet are measured by the skin thermometers attached to the dorsum of the foot.

Spinal analgesia is obtained as high as the 4th dorsal segment. The Howard Jones method, using 1/1000 or 1/1500 nupercaine is employed. Care is taken in all details which could affect the skin temperature. The anesthetist should be satisfied that the cardiovascular system of the patient will withstand the stresses placed upon it by a high spinal analgesia without the use of analeptic drugs. Gangrene of the leg or foot may be precipitated if organic disease of the arteries is present. 7 references.

F. A. M.


Fear of pain undoubtedly deters patients from seeking dental treatment. The purpose of analgesia in dentistry is to reduce or eliminate pain. The use of conduction analgesia greatly extends the scope of oral surgery, but certain precautions must be observed to get the best results. Aspesis is important. Prevention of syncope, or, when it occurs, prompt treatment, is important. Although there are no certain means of averting toxic reactions to the local anesthetic, premedication with barbiturates probably has some effect in guarding against them.

Of the inhalation anesthetics useful in producing dental analgesia, chloroform, because of its high toxicity, has been discarded. Ether is not suitable for analgesia because of its pungency. Vinszthene is difficult to control because of its volatility. Cyclopropane is so potent that it is difficult to avoid anesthesia. Ethyl chloride is considered to be a toxic and dangerous drug but has been used extensively for analgesia. Nitrous oxide with oxygen or with air is in many ways superior to other inhalation agents. Trichloroethyl ene has recently been used for both analgesia and anesthesia shows great promise in dental work.

Premedication is of great help, especially when nitrous oxide with air is to be used. With any form of analgesia
the correct psychological approach to the patient is important. 16 references.

F. A. M.


Head-drop seemed to occur more rapidly in rabbits when they struggled following intravenous injections of quaternary quinine derivatives. It was later observed that shortly after recovery from or during convulsions induced in rabbits by injection of cocaine or veratrine, the amount of d-tubocurarine required to produce head-drop was markedly reduced. In view of these and observations of other workers, it was decided to make quantitative studies of the synergistic effect of exercise on curarization, using the rabbit 'head-drop' assay method.

Running, violent exercise and moderate exercise of the hind limbs only were studied. The results showed that, in the production of head-drop in rabbits, there is a definite synergism between d-tubocurarine and muscular activity. This synergism is demonstrable after only one-half minute of intermittent but strenuous exercise and, by prolonging the period of exertion to two minutes, the synergism is measurably augmented.

The mechanism of this apparent synergism is being investigated further. In anesthesia, following a stormy induction, in which the patient has been hyperactive, these findings would suggest greater caution in the use of curare than when the induction has been quiet. The beneficial effect of sodium amytal, which protected rats against ordinarily fatal doses of d-tubocurarine, may be explained by this study. 3 references.

F. A. M.


During the years 1944, 1945, and 1946, at the Methodist Hospital, Brooklyn, Rh factor determinations were made in 7032 women, and 1042 (14.7 per cent) were found to be Rh negative. In the same period 572 Rh negative mothers were delivered. Somewhat less than one-half (232) babies received transfusions of mother's blood with the loss of no viable baby from erythroblastosis. In the group of 340 not receiving mother's blood, there were 5 deaths from erythroblastosis: 4 received donor's blood, 1 had no transfusion.

Comparison was made between the blood of 100 babies who received cord transfusions of Rh negative mother's blood and 100 babies not cord transfused with Rh negative mother's blood. The transfused babies had an average of 678,000 more red blood cells than the non-transfused babies. A study of the compatibility of Rh negative mother's blood and baby's blood showed that in 80 cases there were only 10 in which there was any agglutination when the mother's cells and the baby's serum were used. One baby transfused with incompatible mother's blood had no reaction. A study of the compatibility of Rh positive mothers' and babies' blood showed 6 in 46 cases in which agglutination occurred when mother's cells and baby's serum were used.

There were 13 cases of erythroblastosis or suspected erythroblastosis in which transfusions of mother's blood were given. There were no reactions and no deaths. These 13 infants all had some blood dyscrasia or the mother had a history of losing babies from erythroblastosis. There