

LESER, A. J., AND THIENES, C. N.: *Effects of Atropine on the Local Action of Procaine*. Proc. Soc. Exper. Biol. & Med. 45: 109 (Oct.) 1940.

Since there are contraindications to the use of epinephrine to prolong the action of procaine, the authors sought another drug which would have a similar effect upon the duration of procaine anesthesia, without the toxicity of epinephrine.

Duration of anesthesia was studied following subconjunctival injections of 1 per cent. procaine with and without the addition of atropine in a concentration of 1-100,000. Following injection under the rabbit's conjunctiva of 1 per cent. procaine, a 4.5 volt current did not cause reflex closure of the lids during a fifteen minute period. Following injections of 1 per cent. procaine solution containing atropine in a concentration of 1-100,000, a stimulus of 8 volts did not cause reflex closure of the lids until twenty-five minutes after the solution had been injected.

The authors state that stronger concentrations of atropine did not further prolong the action of procaine and caused a reddening of the conjunctiva with a dilatation of the pupil.

Since atropine decreases the permeability of frog's skin, the authors believe it possible that prolongation of the effect of procaine by atropine is due to this alteration of permeability.

M. H. H.

ADRIANI, JOHN, AND ROVENSTINE, E. A.: *Effects of Spinal Anesthesia Upon Venous Pressure in Man*. Proc. Soc. Exper. Biol. & Med. 45: 415 (Oct.) 1940.

The authors report that a consistent fall in venous pressure, amounting to 25 per cent. of the control level, accompanied high spinal anesthesia (D<sub>4</sub> or above) in the human subject. Decreases in the arterial pressure were accompanied by a further parallel fall

of venous pressure. In low spinal anesthesia (D<sub>5</sub> or below), the changes in venous pressure were inconsistent. After the administration of intravenous ephedrine, they found a parallel rise in venous and arterial pressure.

M. H. H.

MOLL, H. H.: *The Action of Parasympathetic-Mimetic Drugs in Asthma*. Quart. J. M. Vol. 9 (July) 1940.

"Pilocarpine has been used for testing asthmatics but as it produces sweating and salivation rather than bronchospasm it is not very satisfactory. Of the parasympathetic-mimetic drugs the stable chlorine esters are more useful and of these, acetyl-B-methylcholine (mecholy, Merck) is particularly interesting in view of its action on the bronchi. Mecholy mimics parasympathetic stimulation and has muscarine-like actions similar to those of acetylcholine, but is more stable. The usual dose for subcutaneous injection is from 10 to 25 mg.

"The attack produced by mecholy is indistinguishable from a spontaneous attack of asthma and patients say that they experience the same sensation.

"The action of mecholy is rapidly controlled by atropine, and a subcutaneous injection of 1/100 grain of atropine sulphate controls all the effects of parasympathetic stimulation including the respiratory symptoms in two to three minutes. . . . These observations, viewed in the light of current physiological conceptions, lend support to the view that the asthma-like attack produced by mecholy is caused by stimulation of the cholinergic nerves.

"Adrenalin given hypodermically also controls the effects of mecholy within two to seven minutes. Ascorbic acid in massive doses (500 mg.) injected intravenously has similar action to adrenalin, although it is not so prompt. . . .