

no longer obtainable on occlusion of the arteries. Resuscitation can frequently be repeated with Ringer's solution a number of times before a condition is reached when it is no longer effective.

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Barium-epinephrin antagonism on the excised surviving intestine.

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Experiments conducted recently on the excised surviving intestine of the frog, showed that the barium contraction could be wholly or partially removed by epinephrin (Arch. Inter. de Pharmacodyn. et de Therap. Paper in press).

Inasmuch as the frog's intestine in Tyrode's solution, reacted to pilocarpine in an unexpected, heretofore undescribed manner, namely, to produce relaxation, it was thought that the barium-epinephrin antagonism was peculiar to the frog.

Further experiments, in which excised surviving intestinal segments, from the turtle and rabbit were used, showed that the barium-epinephrin antagonism could be demonstrated in these animals. For example, in the turtle, the contraction caused by 10 mg. of barium chloride was completely antagonized by 0.4 mg. of epinephrin. This is, of course, contrary to the current conception that barium act, directly on the contractile substance and epinephrin on the receptive mechanism.

This antagonism does not seem to have been previously described in the literature; however, Professor A. N. Richards informs me that he also had observed it in the excised rabbit's intestine.