

From this it would seem that the reaction of the anaphylactic uterus while still supplied with normal nerve and blood elements is different from its reaction when isolated from the rest of the body.

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**Effect of lead salts and of the nitrites upon the movements
of the intestines.**

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Riegel (1875) and J. Pal (Die Gefässkrisen, 1906) suggested the use of amylnitrite for the control of pain in lead colic and in the gastric crises of tabes dorsalis, believing that the fall of blood pressure sufficed to bring about diminution in these symptoms.

The present series of experiments was undertaken in order to determine whether the nitrites might not act by causing relaxation of a spastic condition of the intestinal walls. The experiments were carried out on rabbits whose intestinal movements were observed through a large window in the abdominal wall, which was closed from the outside air by inserting a crystallizing dish 10 cm. in diameter. The sides of the crystallizing dish were coated with thick beeswax and the window was held in place by fixing the abdominal walls around it with a purse string suture. The animals were lightly anæsthetized with ether.

Injection of 5 mg. lead acetate per kg. immediately caused the onset of intense peristaltic movements which seemed to be due to stimulation of the preganglionic synapse, since they were abolished by injection of nicotin or by painting nicotin upon the intestine, but were not affected by extirpation of the spinal cord and section of the vagi. As was suspected from the clinical results reported by Riegel and Pal, this peristalsis could be inhibited by inhalation of amylnitrite, by placing two drops of nitroglycerin upon the tongue or by the injection of 80-100 mg. per kg. sodium nitrite. The effects of the two former drugs were most marked, though the effects of the latter were more prolonged.

Atropin, either locally or intravenously, also inhibited the peristalsis, as had been shown by Harnack.

The same effects were also obtained with the nitrites and with atropin when increased peristalsis was brought on by the local effect of heat, secured by placing warm water in the crystallizing dish window. The increased peristalsis resulting from this procedure was inhibited by amylnitrite, nitroglycerine and sodium nitrite, and atropin, exactly as was the lead peristalsis. Similar effects were obtained when the peristalsis was produced by direct faradization of the solar plexus which also was inhibited by these drugs.

These experiments establish the rôle of the nitrites as inhibitors of intestinal peristalsis, and furnish an experimental basis for the therapeutic results obtained by Riegel and Pal in lead colic, and by the latter also in the gastric crises of tabes, by the administration of amylnitrite; and they demonstrate that the mechanism in these cases is probably not merely the change in blood pressure but particularly the inhibition of intestinal spasm.

The results are quite uniform, sudden and striking enough to warrant its use as a class exercise in experimental pharmacology.

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Observations upon a rat sarcoma treated with emulsions of embryonic tissues. (Preliminary Report.)

By **KENNETH TAYLOR, M.A., M.D.** (By invitation.)

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In view of the accepted value of total embryo emulsion as an immunizing agent against propagable tumors first demonstrated by Schöne (*Munch. Med. Woch.*, 1906, LIII, 2517) and later used successfully by many other investigators, the following notes on the influence of special embryonic tissues and of placenta on established rat sarcoma seem of sufficient interest to be reported.

The tumor used in these experiments was a sarcoma kindly supplied the laboratory by Dr. Loeb. During the period covered by the investigations it showed the following biological characteristics: