unaltered, or may be diminished at a time when the rectal temperature is rapidly increasing.[2] With this in mind we have carried out a number of observations on dogs which have been eviscerated according to the method described by Andrews.[3]

In our previous experiments we have made use of a continuous injection of a dilute suspension of *B. coli.* When so injected into the anesthetized animal, a short latent period is followed usually by the onset of a severe chill, which may last either continuously or intermittently for several hours.

In eviscerated animals which we have similarly injected (after the period of recovery following the operation) there was no evidence of chilling, nor was there an increase in rectal temperature. Of course these animals cannot be considered normal because they have a low CO_2 combining power and a very low K/Ca ratio.

We believe that the experiments offer additional evidence that the response of the splanchnic organs is of greatest importance in the production of fever. In eviscerated animals the effect of the bacterial injection on the liver is absent, the peripheral orientation (sympathetic) is not established, and heat loss is not retarded.

If the effect of the bacterial injection were directly on the so-called heat regulating center of the brain, the peripheral effect at least should be undisturbed.

The chart which we present is typical for experiments of this type.

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[1] Petersen, W. F., and Müller, E. F., *Klin. Wochens.*, 1926, v, 53-57.

[2] Petersen, W. F., and Müller, E. F., *Arch. Int. Med.*, in press.

[3] Andrews, E., PROC. SOC. EXP. BIOL. AND MED., 1927, xxv, 108.

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The Lymph K/CA Ratio of Dogs During Continuous Intravenous Injection of B. Coli.

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In dogs with thoracic incanulation, prepared under local anesthesia, the continuous intravenous injection of dilute *B. coli* suspension, results in a series of chemical changes in the lymph blood, which can be correlated to the clinical picture.

In the normal animal, a prompt lowering of the K/Ca ratio takes place, followed by a series of fluctuations until a time of maximum injury occurs, when a ratio as low as 0.8 may be reached. The primary drop in the ratio (due to a slight increase in the calcium and a considerable decrease in the potassium) is evidently associated with a primary stimulation of the splanchnic organs. The cellular effort to reestablish the normal equilibrium probably accounts for the fluctuations in the ratio after the primary drop.

During the periods of low K/Ca ratio, an increase in the lymph volume and lymph concentration give evidence of a coincident increase in permeability of capillaries and tissues.

The CO_2 combining power takes a progressive course downward without marked fluctuations of the curve.

The period of maximum injury is usually followed by an antimortem increase in the ratio, due probably to the liberation of potassium from the red blood corpuscles. At this time a most marked gastro-intestinal symptomatology usually occurs (vomiting and diarrhea).

Animals in whom a low K/Ca ratio is present before the injection is started, have an initial response that is paradoxical, *i. e.*, the K/Ca ratio increases primarily. The complete details of the experiments will be published in the *Archives of Internal Medicine* and the *Journal of Infectious Diseases.*

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Skin Reactions with B. Typhosus Filtrate.

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For several years we have been studying skin reactions produced by a variety of bacterial filtrates in healthy persons, and in patients with different diseases. The recent typhoid epidemic in Montreal seemed to offer an unusual opportunity for further observations on the result of skin reactions with typhoid filtrates in typhoid fever patients. Through the courtesy of Dr. Ralph Lynch, of the Montreal General Hospital, observations were made on skin reactions of 22 typhoid patients in different stages of the disease. Intracutaneous tests with typhoid filtrates were also observed in other groups; for