70 (213)

On the influence of CO_2 on the viscosity of the blood.

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It has been proved by the author[1] that the blood in the veins possesses a somewhat greater viscosity than the blood in the arteries. As this difference is caused no doubt by the greater amount of CO_2 present in the venous blood, it became of some consequence to determine whether the arterial blood could be made to assume a greater viscosity by increasing its CO_2 content.

The dogs used in these experiments received alternately a supply of normal air and air charged with CO_2. During the period of inhalation of the air plus CO_2 the arterial blood showed a somewhat greater viscosity than during the time when the animal breathed normal air. The changes appeared very promptly, but were never very conspicuous. The specific gravity of the blood pursued a course parallel to that of the viscosity.

71 (214)

Agglutinins and precipitins in anti-gonococcic serum.

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In December, 1906, I described the action and method of production of an anti-gonococcic serum which gave evidence of being of therapeutic value in the treatment of gonorrheal arthritis. At the time announcement was made of the fact that the serum contained specific agglutinins and precipitins for gonococcus. Since then a detailed investigation into the nature of these anti-bodies has been carried on. The results of this study may be summarized as follows:

1. Rabbits and other laboratory animals, when inoculated with cultures of gonococcus, raise specific agglutinins and precipitins.

[1] This journal: 1903, i, p. 23.