vaccinia, septic pneumonia, etc.) the substance causing increased pressure and the depressor substance were found.

The organs which possess pressor substances are apparently important organs of immunization. The organs with the depressor substances are possibly eliminating or fixing the split-products or poisons arising from the disease. The adrenals are probably simply one of a number of organs, which possess pressor producing tissues, and which when acting altogether in the whole living organism produce the general pressor substances or immuno-pressor substances. In vivo these pressor substances are probably present in every tissue and form part of the factors which overcome infection. They may be the first step or a very important step in overcoming infection.

These results apparently furnish an indicator as to when and how to re-inject animals already afflicted artificially or naturally with an infection or intoxication, with the purpose of immunizing and healing the diseased animals. That the rôle of these pressor substances, present in experimental immunity is important, we do not doubt. The use of an immunizing dose which is just sufficient to cause their production may be what these observations indicate.

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Preliminary communication on a complement deviation reaction exhibited in pregnancy.

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In a series of twenty-five normal pregnant women at term in which syphilis could be excluded the blood of the mother was taken from the vein during labor and the blood of the infant from the cord at the time of delivery. The sera after separation from the clots were frozen and allowed to remain in the icebox 48 hours before being employed. A series of complement deviation tests were carried out, using both unheated and heated sera of mothers

and infants in conjunction with a large variety of antigens with the following results. The unheated mothers' sera invariably contained antibodies capable of causing a well-marked deviation of the complement when used in conjunction with an antigen obtained by extracting human blood clots with alcohol. The unheated infants' sera tested under the same conditions invariably showed completely negative results. A large variety of alcoholic extracts of tissues used as antigens gave similar although somewhat less marked deviation with unheated mothers' sera and absolutely negative results with unheated infants' sera. The deviating body concerned in this reaction is destroyed by heating for ½ hour at 58° C. The mother's sera tested after heating were negative to the antigens enumerated above, and those of the infants either negative or very slightly positive, but exhibiting on the whole a somewhat greater capacity to deviate than that possessed by the heated mothers' sera. The deviating capacity of unheated mothers' serum varies greatly, certain cases exhibiting a complete deviation only when employed in concentrations as high as .05 to .075 c.c. of serum, others giving a complete deviation when amounts as small as .001 c.c. of serum were employed. It is important to note that the antibodies in question occasionally fail to make their appearance until after the serum has been frozen for two or three days as indicated above. Similar non-specific immune bodies destroyed by heating at 58° C. have been observed in cancer and other pathological conditions,[1] and to a certain extent in supposedly normal individuals. The entire absence of these bodies in the blood of newborn infants and their invariable occurrence in the blood of pregnant women at term indicates that in this case at least they probably bear some relation to the reaction of the body against detached fetal cells or proteid or enzymatic bodies of fetal origin. The occurrence of this reaction to a marked extent in cancer, particularly in those cases in which tumors are absorbing under treatment, lends further support to this point of view.

[1] Clowes, *Zeitschrift f. Krebsforschung*, 1912, Vol. XII, page 421.