The slight contraction caused by *pars intermedia* transplantation and a slight temporary darkening of the surface of the tadpoles into which the *pars nervosa* is transplanted may be due to the presence of secretion which has been interchanged between these two intimately associated structures by diffusion. In the case of the *pars intermedia* transplants pigmentation becomes progressively deeper until at the end of 3 or 4 weeks it is extremely intense. Transplantation of the *pars nervosa* never gives more than a slight temporary deepening of color that disappears completely in 2 or 3 days.

We believe that the above data strongly point to a specific influence exerted by the *pars nervosa* upon the distension of the body wall.

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Do Foreign Proteins Multiply in the Animal Body?

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If 2 cc. horse serum per kilo of body weight are injected subcutaneously, in minute divided doses, into a normal dog, and, if the absorption of the injected horse proteins into the canine circulation is followed by quantitative tests with rabbit precipitin, data are obtained that suggest a 100% absorption of the injected horse proteins into the blood stream by the end of 4 to 7 days, rising to a 200%, or even a 400% absorption by the 14th to 21st day. A 200% horse protein assay of the blood alone might well mean a 1000% or even 2000% alien protein content of the body as a whole.

This does not necessarily mean that the injected horse proteins multiply as a living virus in canine tissues, a biochemical metaphor thus far suggested solely for the bacteriophage. Among the conceivable alternate explanations are: (a) apparent multiplications due to hydrolysis or colloidal dispersion of the injected horse proteins, (b) the formation of pseudo-horse proteins as a result of denaturization of the body proteins of the injected dog, (c) the synthesis or liberation of antibodies of approximate horse protein specificity, and (d) toxic increases in some hypothetical non-specific precipitin reaction.

This paper represents selected data from over 50 experimental and control dogs.