

DETECTION OF IDENTICAL ANAPHYLACTOGENIC
PROPERTIES OF THE BLOOD SERUM IN ANIMALS
OF DIFFERENT SPECIES (BRIEF COMMUNICATION)

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The precipitation method is widely used at the present time for studying the comparative properties of the serum proteins of different animals.

The object of this investigation was to compare the antigenic properties of the serum proteins of the adult ox and sheep by means of the method of active anaphylaxis in guinea pigs.

Experiments were carried out on 50 guinea pigs. The animals were sensitized by subcutaneous injection of the antigen, and 25 days later the reacting dose was injected intravenously. The character of the anaphylactic reaction was noted.

The animals sensitized with ox serum gave an anaphylactic reaction to the reacting injection of sheep serum, and vice versa.

However, 0.4-0.5 ml of the heterologous serum was required to produce acute anaphylactic shock, compared with only 0.02 ml of the homologous serum.

The results show that the blood serum of the adult ox and sheep possess identical anaphylactogenic properties, evidently because they contain proteins of identical antigenic structure. These findings are in agreement with results obtained by other workers showing that complete immunologic identity exists between the embryo-specific serum α -globulins of the ox and sheep.

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