100 (1278)

Types of anaphylactic reaction.

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Study of isolated anaphylactic lungs by perfusion methods[1] shows that there are three types of pulmonary anaphylactic reaction:

(*a*) *Bronchial Anaphylaxis*, or the spasmodic contraction of the bronchial musculature, unassociated with recognizable changes in the pulmonary blood vessels. This type of reaction is illustrated by the lungs of actively sensitized and actively immunized guinea pigs, and by the lungs of guinea pigs passively sensitized with homologous serum.

(*b*) *Vascular Anaphyalxis*, or the spasmodic contraction of the pulmonary blood vessels, usually accompanied with edema. The vascular reation is usually followed by a mild bronchial reaction. This type of reaction is illustrated by the lungs of guinea pigs passively sensitized with heterologous serum, and by the reaction of normal lungs to certain protein split-products and incubated blood mixtures.

(*c*) *Pseudo-Anaphylaxis*, or the plugging of the pulmonary blood vessels with thrombi and agglutinated corpuscle masses.

101 (1279)

Passive cellular anaphylaxis.

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Tests of passively sensitized guinea pigs, by perfusion methods, show that the cellular reactions of lungs passively sensitized with homologous serum are apparently identical with those of actively sensitized lungs.

[1] W. H. Manwaring and Yoshio Kusama, *Journ. Immunology*, II, 1917, 157.

It is therefore not necessary to assume the local formation of antibodies in order to account for the active sensitization of pulmonary tissues.

102 (1280)

The rôle of hepatic tissue in anaphylaxis.

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If 0.25 per cent. goat serum in 50 per cent. defibrinated normal blood is repeatedly perfused through the liver of a normal guinea pig, a slight reduction in the toxicity of the perfusion fluid is usually observed, on subsequent tests with isolated anaphylactic lungs. In no case, however, is the reduction in toxicity sufficient to prevent the anaphylactic reaction in these lungs.

If the liver of an anaphylactic guinea pig is similarly perfused, the perfusion fluid usually becomes almost completely non-toxic for anaphylactic lungs.

This reduction in toxicity is not accompanied by a measurable decrease in the amount of goat protein in the perfusion fluid, as determined by a subsequent titration with a specific precipitin.

103 (1281)

The food value of soy bean products.

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Soy beans fed as the sole source of protein, or as a supplement to corn gluten, are suitable for the nutrition of rats. They contain sufficient water-soluble vitamine to promote normal growth; for diets containing soy bean flour, butter fat, starch, and an artificial salt mixture have promoted growth as well as comparable rations containing natural protein-free milk. The pres-