

by its morphological appearance and its manner of growth. The failure of *B. pneumosintes* to produce gas does not help in the differentiation since the bacterium we are describing frequently fails to show gas. I do not believe the cooked meat medium was used by Olitsky and Gates. (2) It is filterable through tested filters. Olitsky and Gates do not give any method by which their filters were tested. (3) It is found in the oral cavities of man and rabbits, and thus could lead to confusion with *B. pneumosintes* from these sources. (4) Comparable experiments to those done by Olitsky and Gates will have to be carried out to determine whether this common, extremely small anaerobe will alter the blood picture after intratracheal injection, or lower the resistance of the lung to secondary invasions by other common micro-organisms of the respiratory tract, or will show any serological or other relationship to *B. pneumosintes*.

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Anaphylactic reactions in isolated canine organs.

By W. H. MANWARING, R. C. CHILCOTE, and V. M. HOSEPIAN.

[From the Laboratory of Bacteriology and Experimental Pathology, Stanford University, California.]

If the isolated organs of horse serum sensitized dogs are perfused with Locke's solution containing 0.5 to 1 per cent. horse serum, the following reactions are observed:

(a) *Hind quarters*: Slight increase in perfusion resistance, reducing the rate of perfusion flow about five per cent. No demonstrable edema, except on genitalia (female).

(b) *Intestines*: Increased perfusion resistance, reducing the perfusion flow about twenty-five per cent. Increased peristaltic movements; distinct edema of intestinal wall; increased volume of intestinal contents.

(c) *Liver*: Increased perfusion resistance, reducing the perfusion flow about twenty-five per cent. Distinct hepatic edema.

(d) *Lungs*: Marked increase in perfusion resistance, reducing the perfusion flow fully seventy-five per cent. Marked pulmonary edema; non-collapse of lungs on releasing the tracheal clamp.

The reactions in the intestines, liver and lungs are qualitatively similar to the histamine reactions previously reported.¹ The reactions in the hind quarters, however, differ from the histamine reactions: (a) in the absence of the marked edema characteristic of the histamine perfusion, and (b) in the substitution of a slight vasoconstriction for the marked histamine vasodilation.

If reactions similar to those observed on blood-free perfusions of isolated organs take place during anaphylactic shock in the intact animal, one can readily understand why the acute fall in arterial blood pressure, the characteristic feature of canine anaphylaxis, does not take place in dehepatized dogs. Peripheral vasoconstriction (intestines, hind quarters) would tend to increase the arterial blood pressure in these animals, while the reduced blood volume from edema would tend to decrease this pressure. The combined action of these two factors might readily leave the blood pressure unaltered. The pulmonary vasoconstriction is presumably compensated for by an increased strength of the myocardial contractions.

Defibrinated blood perfusions will be reported later.

¹ Manwaring, W. H., Monaco, R. E., and Marino, H. D., PROC. SOC. EXP. BIOL. AND MED., 1922, xx, No. 5.