

In the internal organs, Liver, Spleen and Kidneys, the author describes small, sharply bounded, tubular structures filled with Bacteria, identical with those found in the skin. The cells in the neighborhood of these degenerate, their nuclei disappear, and small groups, about the size of miliary tubercles are formed. This is in the early stage of the disease. Suppuration takes place later with disappearance of the Bacteria.

Dr. Weigert is inclined to regard these as structures analagous to the pocks on the cuticle, and believes that for the first time proof is here offered in an acute exanthem of a process going on in the internal organs similar to that in the skin. As far as can be gathered from the account, the Bacteria correspond rather to the Micrococci occurring in Diphtheria than the rod-shaped forms of putrefaction.

The author is of opinion that the destructive effect of the Bacteria is due to some chemical action on the tissue causing necrosis of the cell elements, while inflammation with suppuration follows as a secondary effect.

The two accounts which we have here of the pathology of ovine and human small-pox (in their essence similar) are by no means concordant. In the one we have a remarkably full and clear description of the development of an organism going hand in hand with the development of the lesions characteristic of the disease, and it seems hard to believe that the relationship between the two is not that of cause and effect. In the other, human small-pox, the account is much less complete, and though tube like aggregations of Micrococci occur, like those described by Dr. Klein in the ovine disease, we have no record of the growth, development, and fructification of these bodies. Nevertheless these form most valuable contributions to our knowledge of the intimate Pathology of this disease, and Dr. Klein's research especially places the germ theory on a basis which heretofore it has not possessed.