

named the streptococcus viridans. In the further investigations it was shown that streptococcus viridans represented a group of organisms which, although having some common characteristics separating them from other members of the streptococcus group, had further points of differentiation which divided the group into a number of types, whose characteristics were fixed and whose habitat was more or less defined. To this group belong the streptococcus fecalis, streptococcus salivarius, streptococcus equinus, streptococcus mitis, and several unnamed forms. The group in itself is quite distinct and by proper means can be readily recognized.

The organisms which have been isolated by different observers from acute and subacute endocarditis belong to the streptococcus viridans group as described by Schottmuller. Such organisms as were described by Poynton and Paine as the streptococcus rheumaticus, the endocarditis coccus of Libman, and the organisms described by Rosenow must be considered as members of this group. It has been pointed out by Gordon and others, including my colleague, Dr. Holman, that the organisms found in connexion with heart lesions do not represent an individual type or a specific variety, but recognizing that they belong to the streptococcus viridans group, they may be represented in a variety of types. Of five organisms obtained from different cases of heart disease, three were shown by Gordon to simulate the streptococcus mitis, while two had characters similar to streptococcus salivarius. Dr. Holman has likewise demonstrated the type of streptococcus salivarius in the blood of patients with vegetative endocarditis, while in three other instances he isolated a form simulating the streptococcus fecalis and in another the streptococcus equinus. Andrewes and Horder in an extensive study upon streptococci found the presence of the streptococcus viridans in fifteen out of twenty-three cases of malignant endocarditis. Of these, eleven belong to the group of streptococcus salivarius; and four to streptococcus fecalis.

In five of our cases having acute non-suppurative processes in the heart, arteries, and kidneys, there was isolated a type of the streptococcus viridans from the blood at autopsy.

The association of these organisms with the occurrence of inflammatory processes in each of the three organs under discussion, led us to test our results upon animals. Through the kindness of Dr. Holman, I had the opportunity of obtaining a number of types of the streptococcus viridans for the tests. Rabbits were used, and living cultures in different amounts were inoculated intravenously. Nine cultures giving the reaction of the streptococcus fecalis,