

vegetative aortic Endocarditis; 3, Acute vegetative mitral Endocarditis; 4, Acute vegetative tricuspid Endocarditis; 5, Chronic mitral Endocarditis; 6, Acute serofibrinous Pericarditis; 7, Acute fibrinous Pleuritis of right side; 8, Acute serous apical Pleuritis of left side; 9, Thrombosis of the left subclavian vein.

The bacteriological findings were as follows: Smears from: Aortic valves, Streptococci; Mitral valves, Streptococci; Tricuspid valves, Streptococci; Thrombosis of subclavian vein, Streptococci; Pericardium, Streptococci.

Cultures from: Spleen, B. Coli; Liver, Sterile; Heart blood, Sterile; Thrombus, Streptococci; Erysipelas, Streptococci and staphylococcus albus; Pericardium, Streptococci.

A comparative study of the three strains of streptococci isolated showed them to be identical as far as could be determined by staining and cultural methods. They failed to produce acid and precipitate bile salts in McCoukey's bile salt lactose broth, to which reference will be made later.

There seems to be little doubt that the cardiac lesions in this case were of rheumatic origin, and that the erysipelas was caused by the same organism is also very likely, as there was no other erysipelas in the hospital at this time.

So, in this case, at least, we may conclude that erysipelas may be caused by the same organism that produces acute rheumatic fever.

The exhaustive studies carried out by Marmorek on different strains of streptococci have led him to believe that they are all identical, or, at least, cannot be differentiated. He bases this belief on the fact that after filtering broth in which one strain of streptococcus has been grown, no other streptococci will grow when this filtrate is used as a culture media. Recently Gordon¹² has advocated the use of a very elaborate series of culture media for their differentiation. The principle on which he bases his work is that there may be different chemical reactions with the growth of each class. Gordon and Houston examined about 800 different strains. Later, Andrews & Horter¹³ made a very elaborate report of about 400 more colonies. They combine these with the results of Gordon and Houston and attempt a classification of 1,200 odd strains, according to the reactions obtained on Gordon's series of media. They make the following main classes: 1, Streptococcus equinus; 2, Streptococcus mitis; 3, Streptococcus pyogenes; 4, Streptococcus salivarius; 5, Streptococcus anginosus; 6, Streptococcus faecalis; 7, Pneumococcus.

Besides these they made numerous sub-divisions which depended upon differences of minor importance. They acknowledge that it is a most complicated classification, but hope that more study may simplify it and make it more practicable.

Among the 400 cases examined by Andrews and Horter there