

Nevertheless we are compelled to admit that all of them are either the result of the primary acute process or else that in the process of a vicious circle one lesion has followed the other. A close study of the various organs can alone determine the direct effect of this systemic disease upon each, and with this in view I have followed, in a few cases, the lesions to be observed in the arteries and more particularly the aorta during the course and different stages of rheumatism. This study presents purely the pathological side of the question. The cases studied were selected from a series of autopsies, only those being taken in which one or more previous attacks of acute rheumatic fever were established in the clinical history and in the presence of interstitial myocarditis.

In classifying the cases here examined I have divided them into three groups: (1) Acute rheumatic fever, first attack; (2) recurrent rheumatic fever, and (3) chronic rheumatism. It was interesting to find that the changes in certain arteries were analogous to the lesions found in the heart in the different stages of the disease; in fact, the resemblance of the inflammatory reaction in the aorta to that of the myocardium was very great. It may, however, at the very beginning, be pointed out that the causative agent of acute rheumatic fever has a predilection for the perivascular tissues of the smaller vessels, the arterioles, and does not appear to disturb the larger arteries directly, save by damage in the vicinity of the vasa vasorum. Up to the present I have not made a systematic study of the arterioles of all the viscera of the body. My observations have, however, indicated that the arterioles of the internal organs, except the circulatory system, are not attacked with any constancy.

The aorta shows a fairly typical lesion. This lesion is particularly to be observed in the ascending limb and in the arch, less frequently in the descending thoracic and seldom in the abdominal aorta. The distribution of the process in the aorta is similar to that of syphilis, and, as a matter of fact, to that of many bacterial infections. The main coronary arteries of the heart are inconstantly involved, while, on the other hand, the finer ramifications of this vessel are invariably affected, being a part of the myocardial disease which forms an important factor in the pathological picture of rheumatic fever. Moreover, the arterioles passing to the serous