

middle third of the media, and that these small bloodvessels were surrounded by an excessive amount of fibrous tissue, along with a cellular infiltration consisting of lymphocytes, plasma cells, and a few endothelial cells. This perivascular infiltration was quite constant, and at times the aggregation of wandering cells was quite marked. In some areas it was definitely indicated that some of the muscle cells and elastic fibers had been destroyed and their place taken by a meshwork of new connective tissue. Polymorphonuclear leukocytes were for the most part wanting.

The adventitia also showed a lymphocytic infiltration around the vasa, as well as an increase in the connective tissue close to the media. Some of the nutrient vessels showed a thickening of their walls with a narrowing of their lumina.

It is evident that in these cases of recurrent rheumatic fever certain changes have been produced about the aorta, which subsequently lead to an increase of fibrous tissue in the outer portion of the media and in the adventitia. Moreover, it would appear that with each recurrent attack of the disease a new non-suppurative inflammatory reaction occurs in the sites of the former lesion. Therefore in the recurrent types of the disease various stages of the inflammatory process may be observed in the same specimen. The former attacks are indicated in the presence of adult connective tissue, while the recent progressive condition is seen in the non-suppurative inflammatory infiltration.

CHRONIC RHEUMATISM. All of the eight cases considered in this class were such as had suffered, for a considerable time, recurrent or progressive heart disease associated with acute rheumatic fever. The majority had died of broken cardiac compensation. The most constant cardiac finding was a chronic interstitial myocarditis, while an old endocarditis involving one or other of the valves was not uncommon. In this series of cases the lesions of the aorta and of the smaller coronary arteries was quite constant, but varied in the extent of the reaction. Macroscopically the intima was more or less nodular. At times the thickening of the intima was quite extensive, while, however, it showed little evidence of degeneration or atheromatous change. There was usually a great loss in the elasticity of the entire vessel wall, and the artery felt thicker and heavier.