with the vascular system of the organ. The larger vessels were the least involved, but the interlobular vessels and the afferrent vessels of the glomeruli showed an inflammatory attack of a considerable degree. The nature of distribution of these vessels led to a radiating character of the inflammatory process, extending from the intermediate zone to the capsule. The picture was identical with that described in the spontaneous lesions in man. Moreover, all gradations from the acute process to the chronic fibrosis could be followed. A mild grade of granular kidney was produced. In three instances in which the disease had lasted over four months there appeared slight hypertrophy of the heart.

For the present I need not go into the further details of these experiments, save to indicate that the lesions produced experimentally closely resembled those which we meet with clinically. The important finding of the correlation of the heart and kidney in the inflammatory reactions, is worthy of comment to indicate how a general bacterial process may underly a pathological condition arising in each, and before either of these organs has an affect upon the other through its functional incapacity. The cardiac degeneration occurs during the early and acute stages of the disease. The repair with its accompanying fibrosis is prone to have hypertrophy develop with it. So too, the kidney lesion is individual, developing from a bacterial irritant inducing fibrosis about its blood vessels. A vicious circle may, no doubt, develop in the course of the disease which may react on other vital organs. The peculiarity of the infection in being distributed by the small arterioles and having its main action upon the tissue in the vicinity of these, is worthy of our notice. This finding is but a substantiation of the observations of Gull and Sutton. It appears, therefore, that the heart and kidneys bear to each other a relation during this infection only in proportion to the nature and distribution of the inflammation about their vascular system.

I would not have you believe that the arterial affection as an arteriosclerosis is the predominant one, but the organic changes are dependent upon the distribution and the extent of the perivascular inflammatory attack. Moreover, I further wish to indicate that the interdependence of the lesions of the heart and kidneys is through their circulatory system, but not because of an arteriosclerosis as we ordinarily understand it.

Thus our "triple alliance" is complete. Each of the three organs has its individual duty to perform, which has an important bearing upon the health of the other. Common enemies (bacteria)