

For the most part the inflammatory reaction was present in radiating zones, leaving intervening patches of kidney tissue uninvolved. The larger vessels near the base of the pyramids also showed a perivascular reaction, but the main artery to the kidney was, in itself, devoid of inflammatory change.

This non-suppurative inflammatory reaction beginning in the vicinity of the interlobular vessels and extending through the cortex appears to be a typical lesion associated with the common subacute inflammation of the myocardium. In the human organs, however, it is usually associated with other lesions which tend to obliterate the character here described. Individuals dying during the first attack of acute infective myocardial disease have commonly extensive endocardial vegetations. The presence of embolic masses of small or large size is apt to involve the kidney in a well marked infarct or lead to the occlusion of the vessels to the glomeruli with subsequent changes in these structures, not definitely to be viewed as the typical lesion of the disease.

We must, however, recognize a form of acute glomerulonephritis with the local exudate, and occasionally showing a proliferative reaction within the glomerulus or its capsule, as a common reaction of the kidney. The presence of an acute glomerulonephritis in a number of bacterial diseases is now well recognized, particularly through the work of Councilman and Loehlein.

The observations upon the various types of acute non-suppurative nephritis, indicate the close relation of the lesion to the circulatory apparatus. That at times the lesion is greater in the glomerulus while at others the perivascular reaction appears more intense, is not to be wondered at, when we remember the unequal reaction in tissues by many varieties of bacteria. Moreover, the different forms of reaction occurring within the glomeruli may well be variations in the intensity of reaction to a single strain of organism. Thus, as has been amply illustrated in late years, a single irritating agent such as uranium nitrate may give rise to tubular, glomerular, and even vascular lesions in the kidney. We have repeatedly observed a variety of pathological processes in different glomeruli brought about by the same bacterial agent.

These inflammatory disturbances of the kidney, showing their main reaction about the blood vessels and their associated parts, were observed in the early stages of heart and arterial disease. When closely analyzed it will be observed that the reaction in each of these tissues, heart, kidney, and arteries is very similar. There is a type of subacute inflammation particularly distributed in the