

One meets not infrequently with specimens of endarteritis chronica nodosa in the aorta in which various grades of the disease can be recognized. The inner surface of the aorta is studded with pearly intimal thickenings of all sizes and in all stages, from the earliest beginning to the large plaques showing deep fatty change.

If, however, we confine our attention to those small islands of fibroses (be these of endothelial or connective tissue origin), which are just visible macroscopically, and study the microscopic characters of these specimens, we find that the diseased process is confined wholly to the intima with no change in the media. It is well to exclude, as far as possible, the presence of senile changes in the media of the aorta, and hence only vessels of adults under thirty-five years should be examined. By none of the known methods of staining can we demonstrate associated lesions in the media in these early processes of endarteritis. Fat and hyaline changes are wanting, calcareous salts have not been deposited, and the elastic fibers of the media show no inequality in staining. In short, we have to deal with a process which is confined to the intima.

This disease of the intima falls into two classes, according to the classification of Jores, (1) the hyperplastic, and (2) the regenerative.

Jores clearly points out that the hyperplastic thickening of the intima, which leads to an excessive development of the musculo-elastic layer, is a "hyper-physiological" process. There are many factors in the life-history of every individual which throw an increased strain upon this muscle layer of the intima of the arteries, and which, if not too persistent, lead to this natural hypertrophy. When, however, these factors are excessive, degenerative changes develop in the hypertrophied tissues. This result is a common, if not the usual finding in hyperplastic intimal thickenings in later life.

The regenerative lesions of the intima are processes taking place in the tissues superficial to the musculo-elastic layer, and occur quite apart from any changes in the deep intimal tissues. This regenerative process is regarded by Jores and others as a connective tissue proliferation of the nature of an inflammation but lacking, at the same time, the features of inflammation, as found in other tissues. A study of the earliest changes occurring in the development of these minute plaques shows that they are a result of the proliferation of