syphilitic inflammatory type of medial disease; and of Moenckeberg, who made the first serious study of medial degeneration as a separate entity.

A much more satisfactory introduction to our subject will be from the standpoint of arterial structure. It is becoming increasingly recognized that the different parts of the arterial system differ widely in their histological constitution, in that the structure of any given artery is intimately associated with its function-structure and function in fact being largely interdependent. From this, it follows, (1) that the same noxa acting upon arteries of different types will have different effects and (2) that anything of the nature of an adequate knowledge of disease of the arteries-in this case of medial disease-must be preceded by the knowledge of the normal histology of the different types of the arteries. What otherwise would seem to be wholly dissimilar lesions, may be the expression of the action of a common factor; nay, taking a yet broader outlook, and regarding not one coat of the artery alone, but the whole artery : with these pronounced differences in structure, it may be that of functional structure, exercises a decided influence in the course of the disease and the nature of the lesions there attained.

In making the last suggestion, I am passing beyond the limits here set. It is sufficient to lay down that a knowledge of the structure of the media in various parts of the arterial tree must precede any satisfactory discussion of medial disease.

As has been pointed out recently, the type of arterial change (pathological), as well as its extent, depends upon two factors—($\mathbf{1}$) the work and function of the tissue supplied, and ($\mathbf{2}$) the histological structure of the vessel: we will be obliged to discuss these details at length. We will also show in how far the vessels in different organs differ in their histological structure. This, I have found, influences the nature of the disease, which may arise in the vessel. We are becoming familiar, and this mainly through the work on experimental animals, with the action of different drugs and poisons on the vascular tissues. That certain poisons and toxins have definitely a selective action for certain tissues is well known, and this point too is being demonstrated in the effect of poisons on the arterial wall.

4