

FATTY STREAKS IN THE INTIMA OF ARTERIES.¹

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WITH a view of determining the earliest stages of the arterio-sclerotic process our attention was attracted to those minute yellow streaks and dots which are so frequently observed in the arteries of young individuals. It is quite useless to argue the questions concerning the development of intimal scleroses if we study and discuss the late stages of the disease alone. We have ourselves fallen into this error, but, as has been recently pointed out, if we wish to gain a true insight into the complex question of arterio-sclerosis we must attempt to follow the lesion from its earliest beginning. This offers many difficulties, especially in the study of human material alone, while the relation of certain artificially induced arterial diseases in animals to those in man is not at all times evident.

Thus the problem reduces itself to one of the study of the many minute changes occurring in the walls of the arteries, in an attempt to find in one or more of them a succession of changes leading from the early and minute damage to the fully developed arterial lesion. It is well to point out that in studying such a lesion or lesions the successive stages are observed in the vessels from the different individuals, and possibly or even probably those individuals have not suffered the same disease or diseases of like severity as the preceding. The observer can therefore offer very little information from a single specimen of an artery as to the factors at work in the given lesions.

The type of disease which we have under discussion does not, at first sight, appear to have any bearing on Thoma's discussion of arterio-sclerosis. We are nevertheless drawn into direct contact with his work when, as we will show later, the outcome of some of these lesions with early fatty streaks is a condition which is indistinguishable from the later stages of true endarteritis. Thoma has recently reiterated his view concerning the arterio-sclerotic process. He still believes that the thickening of the intima by connective tissue is dependent upon the slowing of the blood current. Exactly in what

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