ARTERIAL LESIONS ASSOCIATED WITH RHEUMATIC FEVER.¹

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(Plates XXIII.-XXIV.)

As our attention has been more and more centred upon the etiological factors associated with arterial diseases, we have had a better opportunity of studying each type in turn and of observing the various grades of intensity in which the particular process may occur. It is only by studying each process accurately that its importance in relation to the general subject of arterio-sclerosis can be determined. A number of such specific processes have received adequate attention, so that to-day we are familiar with at least the main points concerning them. Syphilis of the arteries has been well studied, and the effects of overstrain upon the arterial wall is well known in connection with particular systems. Moreover, we are familiar with the effect of occasional bacterial invasions upon the vessel wall, but the different results that may be induced by the same organism distributed in various parts of the body are not well determined.

Repeated suggestions of the harmful effect of certain bacteria upon the arterial wall have been made by clinicians, and these have, to a certain extent, been verified in animal experimentation.

The clinical evidence of arterial changes, though, in itself, indicative of pathological processes, gives no clue as to the actual lesion that has occurred in the artery. Furthermore, the mode of invasion, as well as the progress of the disease in the tissues of the artery, cannot be followed by the clinical evidence alone. On the other hand, it is difficult to correlate the pathological findings of arterial disease, with the actual factor causing it, if the pathological examination is not accompanied by a study of the disease in life, as well as a study of the agents which have been active in its production.

The association of rheumatism with diseases of the vascular system has been emphasised mainly by French authors. Rheumatic phlebitis, although rare, has been discussed in the works of Bouillaud $(1840^{\,27})$,