

The close relation between the luetic inflammatory processes of the mediastinum and those of the aortic wall is also shown in the late fibroses which lead to such unusual thickening of the arterial coat and which, furthermore, bind the aorta firmly in its mediastinal bed. The thickening of the aortic wall, when involved in syphilis, is the result of a connective-tissue overgrowth in part situated in the intima and media but for the most part lying in the adventitia and binding this structure to the neighboring periarterial tissues. Syphilitic aortitis has always an associated syphilitic periarteritis. As previously stated, we do not often have the opportunity of tracing the early inflammatory responses which communicate between the mediastinum and the aortic wall, but there is always the evidence in the late cases of reparative fibrosis which distorts the vascular structures. Of course in the presence of aneurysm, one must be guarded in distinguishing the fibrosis which has resulted from the syphilitic virus from that which has resulted secondarily to the presence of aneurysm from mechanical irritation.

Though we feel confident of the important part played by the lymphatic system of the thorax in localizing syphilis to distinct portions of the arterial wall, it is not clear as yet why and in what manner the virus finds its way to this particular region of the body. By analogy and in comparison with certain other infections, it is probable that the systemic distribution of the spirochete is accomplished by the blood stream. As with other infections, certain tissues and structures are more receptive for the metastatic infection than others. In some instances the localization of the infection may be associated with trauma, but this can hardly be a factor within the chest. Up to the present time animal experimentation has given no clue suggesting the reason for the thoracic metastasis in man. It is probable that the selection of the mediastinum by this infection is bound up with the question of the biological properties of the microorganism and the favorable conditions presented by particular tissues for its growth.