

the superficial cells. At the beginning, only a single type of cell, which by some is regarded as of endothelial origin, by others as of connective tissue origin, is found to take part in the proliferative change. Later, fine elastic fibrils are found to permeate the intimal plaque.

Such proliferative changes are most commonly met with in bacterial infections, and occasionally in association with poisons.

These lesions may progress to a considerable size before there is any evidence of change either proliferative or regenerative in the media, and no rule can be followed which will indicate the changes in the media during any particular stage of the disease. Moreover, it is not possible to determine any association between the development of these medial lesions and those of the intima. It would seem that, in these cases, the conditions in the media and in the intima arise wholly apart from each other, though they may result from a common cause.

From these cases we must clearly differentiate the lesions which arise in the media as a result of advanced intimal change. This is familiar to all and is quite a different process. When intimal lesions have been progressive and the thickening of this layer has become so advanced that nutrition is no longer able to pass from the lumen of the vessel to the innermost border of the media, nutritional degeneration, with a deposit of fat in the tissues, will take place. In these instances, the medial lesions are obviously secondary to an intimal disease.

Let us, for a moment, give our attention to the diseases affecting the media of the peripheral vessels and determine the part played by this coat in intimal hyperplasias. For this study the iliac, femoral, mesenteric or brachial arteries and their branches serve very well. Particularly in the case of the iliac and femoral arteries, can the medial diseases be studied from their first beginnings to the severest lesions.

The media of the peripheral vessels, as has repeatedly been indicated, is a functional muscular structure which has to do with the control of the blood supply of the part. Under conditions of stress the muscle tissue of the artery is active, and controls the amount of blood passing to the limbs or organs. Where the blood pressure