

particularly weakened, states of the artery these fibres become increased in quantity and size, and indicate according to their characters, certain sclerotic changes in the vessel.

Under certain conditions of stress the musculo-elastic layer may become uniformly hypertrophied, without, however, there being any diseased condition in it or in any other parts of the arterial coat.

The internal elastic lamina is present in arteries of all sizes and structures, but differs in its nature in the two types of vessels. The media, which is the mainstay of the arteries, and which is the distinguishing point between the smallest arteries and the capillaries arising therefrom, is also to be found in all arteries. This tunic consists in every case of unstriped muscle tissue along with, in some cases, more or less elastic fibres, and to a slight extent, connective tissue. The media is bounded on its outer side by an external elastic lamina, which also varies in the different types of arteries. The adventitia forming the outermost tunic, is made up of varying amount of connective, elastic and muscular tissue. Each of these elements fluctuates in quantity to a very great extent in the arteries of the different organs.

*Arteries of the Elastic Type.*—The arteries belonging to this class are the aorta, the first portions of its main branches at the arch, the first part of the common iliacs and the pulmonary. As our interest is mainly centered upon the structure of the media, I shall dispense with the discussion of the minute histology of the intima. Suffice it to say that the intima in the arteries of the elastic tissue type is of far greater importance than in those of the muscular type. And further the structure of the intima in the former is the more complex, and embraces more tissue elements than is found in the latter. The endothelial lining which is common to all vessels occupies the innermost layer and lies upon a slight amount of supporting connective tissue, followed then by a layer of longitudinally placed muscle fibres, as has been described above. These muscles fibres are separated from the media by the internal elastic lamina, which is usually considered a part of the intima.

However, it is not accepted by all that the internal fenestrated membrane belongs to the intima. Donders and Jansen express the