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THE PATHOLOGY OF ARTERIOSCLEROSIS.*

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IN a discussion of such a many-sided subject as the Pathology of Arteriosclerosis, in which there is such an enormous mass of clinical observations with an equally large number of studies upon human post-mortem material, which have served as the foundation stones of older theories, one must guard against being led away into the maze of older theories which are familiar to all present.

Fortunately to-day, as the result of experimental researches of the past few years, we do not depend entirely upon a correlation of clinical facts and post-mortem findings, but can draw upon these results to enable us to elucidate this most important subject.

We cannot say as yet that experimental research has enabled us to offer a clear explanation of the causation of human arteriosclerosis, but each additional fact obtained by direct experiment renders the task easier, and there is no doubt that our knowledge of the pathology of the disease has advanced as much from the publication of Josue's experiments in 1903 upon adrenalin injection in rabbits as during the whole preceding period from the time of Lobstein in 1835.

Arteriosclerosis, or as Marchand suggests is shown now to be called Atherosclerosis, is primarily a disease of the later years of life, but it must not be forgotten that it may occur amongst younger people and, in its typical form, even amongst children.

Leaving on one side the syphilitic disease of the arteries, whether of the smaller vessels or the more recently recognized mesaoritis, chiefly present in the arch of the aorta, we may with Marchand classify the conditions as follows:

1. The simple fatty degeneration of the intima with beginning thickening.
2. Sclerosis of the intima with fatty degeneration and calcification.
3. Sclerosis and calcification of the media, chiefly of the arteries of the extremities.

The first class may be considered to represent the first step in the development of the true intimal sclerosis and to pass over into it.

When seen as one sometimes sees it in the aorta or in the coronary arteries of younger individuals who have died of typhoid, it presents

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