

preliminary overgrowth of the deepest layer of the intima, with splitting of the internal elastic lamina, was not prepared to accept the dictum of that authority that this form is to be regarded as alone arterio-sclerosis. With Dr. Klotz, who followed him, he pointed out that clinical arterio-sclerosis, the form recognized by the hardening of the radials, is of a wholly different type, a type characterized by primary changes in the media. This, the so-called Moenkeberg type, he would also include in his classification. He proceeded to consider in succession the other conditions of arterial change: proliferative endarteritis, syphilitic mesuortitis, etc., which have been differentiated within recent years, and showed in a most interesting manner how from gross and histological changes we are learning to distinguish certain well defined forms of sclerosis.

Following upon this consideration of the classification of arterio-sclerotic conditions Dr. Klotz, of Montreal, took up the subject of the experimental products of arterio-sclerosis, basing himself largely upon his own important studies of the past three years. His main conclusions were (1) that the changes produced in the rabbit by treatment with adrenalin, barium chloride and digitalis are in all essentials identical with the Moenkeberg type of sclerosis seen in the middle sized arteries in man, and he exhibited a series of aortas of rabbits, and femorals and iliac arteries from man showing this correspondence; (2) that while diphtheria toxine causes the same type of disturbance in the rabbit, typhoid and streptococcal toxins and dead cultures of these organisms induce in that animal a primary overgrowth of the intima, a form of endarteritis proliferans. This, so far as we knew, is a new fact, and demonstrates the existence of at least two types of sclerotic change in animals of the laboratory; (3) his observations led him to the conclusion that it was not the high pressure alone that caused the sclerotic changes in adrenalin animals, but that there was in addition a toxic action of this drug upon muscle elements.

Dr. Pearce of Albany, who also has studied extensively experimental arterio-sclerosis, while agreeing in the main with Dr. Klotz, was of the opinion that the degenerative changes in the media are not so much due to a direct intoxication, but are secondary to an ischæmia brought about by the action of adrenalin and allied drugs upon the arterioles and vasa vasorum.

Professor Aschoff of Marburg, laid stress upon the histological variations in the aorta, and its visceral and other branches, suggesting that one and the same cause acting upon arteries of different structure induces distinct varieties of lesions, implying thus that certain at least