

THE CLOSURE OF THE DUCTUS ARTERIOSUS AND ITS BEARING ON ARTERIOSCLEROSIS.

By OSKAR KLOTZ, M.D.,

MONTREAL, CANADA.

THERE have been very many views expounded on the process and nature of the closing of the ductus arteriosus, and yet, up to the present time, there is not one theory that has been universally accepted. Most of the expressions of opinion were made previous to 1883, when Thoma was led to believe that the fibrous closure of this vessel played a great part in the production of arteriosclerosis in later life. As this view has of late years been discredited, the attention of investigators has been taken away from the study of the ductus arteriosus, and very little new work has appeared on the subject in recent years.

Next to the importance which Thoma ascribed to the ductus arteriosus in its relation to arteriosclerosis is the non-closure of the duct in certain individuals leading to permanent circulatory defect with sequelae. Of cases of this nature there are a considerable number reported in the literature, and many of them have formed the basis for the study of the functions of the ductus arteriosus.

I was led to the study of the ductus arteriosus and the nature of its closing by a conviction of the importance of the study of the physiological function and the mechanics of different vessels in the body. I would emphasize my belief that the diseased processes in different arteries is dependent, to a very large extent, on the nature of their walls. We must abandon the old conception that the arterial system is of like structure in all its parts. It represents in truth a common trunk, the aorta, onto which there are engrafted branches of various kinds, each of which has work of special nature to perform.