

serous investments of the stomach, passing downwards to form the anterior portion of the omentum, and then doubling upon themselves to form the posterior aspect and travel upward to enclose the transverse colon. But these membranes fused together are nothing but endothelial and connective tissue-elements. What is characteristic of all great omenta, however delicate, or however loaded with fat, is their remarkable vascularity. The vascular supply is altogether in excess of the needs of the membrane itself; and if the great omentum has any function, that function must be sought for through the vascular system. Without exaggeration, the great omentum may be regarded as a mechanism for supporting and keeping in position a rich arborization of delicate vessels separated by as slight a cell-layer as possible from the peritoneal cavity. As might be expected, with the branching of the main vessels, the finest and most delicate vessels are largely collected toward the periphery and along the free border of the omentum.* Here it is, therefore, that the most prompt reaction is liable to occur.

It is from this point, then, that we must start if we are to appreciate the part played by the omentum in the economy. I have already hinted that it is from the abundant network of delicate vessels that there may be abundant flow of fluid into the abdominal cavity. Similarly the rich system of contained lymph-spaces and lymphatic vessels, and, indeed, of blood capillaries, may be the means of rapid absorption of fluid from the same cavity.

Much as I should like this evening to enter into the more physiological aspects of the omental functions, I must desist; for my personal observations along the lines just indicated are not as yet complete or in a proper state for bringing before you.⁸ What I wish to bring before you to-night is the evidence we possess concerning the activity of these omental vessels in conditions which are constantly being brought before our eyes, but which, it is worth noting, would appear not have been thought worth noting. I refer to their reaction in the localized inflammations of the abdominal cavity, and the results of that reaction in the shape of omental adhesions. I have hunted up all the literature at my disposal. Every one refers to these adhesions, but no one would seem to have thought it worth while to tabulate them or to record their frequency. I cannot pre-

8 Durham (*loc. cit.*) records some most interesting observations upon the part played by the leucocytes in relation to the surface of the great omentum, but does not indicate with full satisfaction the extent of passage of fluid, leucocytes, or foreign particles into or out of the viscus. Similarly, Adler and Meltzür (*Journ. of Exptl. Medicine*, i., 1896, page 482) discuss very fully many important points in connection with the absorption of fluid from the peritoneal cavity, but their observations stop short of determining the exact regions of passage of fluid into the lymph-spaces of the peritoneal wall.