

On the After-treatment of Abdominal Operations.

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ABSTRACT OF LECTURES DELIVERED TO
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I.

In dealing with the question on which I have been asked to address you this afternoon, I shall endeavour not to forget that I have before me an audience of trained nurses, many of whom have for years been engaged continuously in the management of patients after operation, and I shall therefore try to avoid dealing with the technical details of the nurse's work with which you are all familiar, and rather to direct your attention to some of the general principles which govern us in the after-treatment and nursing of patients after abdominal operations. However thorough and complete your early training may have been, it is necessary that you should from time to time have your attention drawn to the advances which are continuously being made in all departments of surgery, in order that the practice of that part of surgical work which falls to you as nurses may be directed in accordance with the most advanced views.

There is, perhaps, no department of surgery in which within recent years greater strides have been made than in that of abdominal surgery; and in the light of our extended experience we have had to revise many of our previous opinions with regard to the peritoneum, both in health and disease. This newly acquired knowledge involves modifications and changes in our nursing procedures, some of which I shall attempt to illustrate in what I have to say.

It is not necessary here to enter into a detailed description of the anatomy of the abdomen. Suffice it to say that the abdomen is one of the great serous cavities of the body—that is to say, it is lined by a serous membrane—the peritoneum—of which there is (1) a *parietal* layer, covering the walls, and (2) a *visceral* layer, covering the organs or viscera. Between these two layers there is what is known as the *peritoneal cavity*, although under normal conditions it is not a free cavity, but rather a potential space, the visceral and parietal surfaces being in apposition. The *Great Omentum* may be regarded as a special fold of the visceral layer of the peritoneum, which, in virtue of its structure and attach-

ments, plays an important part in relation to many diseased processes within the abdomen.

Within recent years much fresh light has been thrown on the *functions of the peritoneum*, and on the rôle it plays in relation to infective processes taking place within the abdomen, particularly in connection with peritonitis. Three of its most important functions may be referred to:—(1) Its *lubricating* function, which diminishes friction by providing smooth glistening surfaces over which the viscera can glide upon one another, and upon the abdominal wall. (2) The peritoneum is a highly *absorptive* membrane. It is rich in lymphatic connections, and has, therefore, the power of absorbing fluids from the peritoneal cavity into the general circulation. This capacity of absorbing fluids may be turned to a useful purpose, as, for example, when we introduce saline solution into the abdomen in the course of an operation in order that it may pass into the vessels. On the other hand, it may prove a dangerous function, as, *e.g.*, in peritonitis, because of the rapid way in which it enables toxins to enter the circulation. It is worthy of remark that the absorptive power is greater in the higher than in the lower parts of the peritoneum. The peritoneum has also (3) a *phagocytic* function, that is to say, it has the property of throwing off, in the exudate from its surface, cells which are capable of eating or destroying organisms; and it rapidly brings up those phagocytes, often in enormous numbers, to any area infected. This phagocytic function is the most important, and also one of the more recently discovered functions of the peritoneum. By its means organisms are laid hold of and so prevented from spreading and from producing toxins, and then, the absorptive function coming into play, both the phagocytes and the organisms they have ingested are absorbed into the general circulation, where they are disposed of. So important is this phagocytic action of the peritoneum that sometimes, before performing abdominal operations, we inject into the patient a substance—nucleic acid—which has the power of increasing the flow of phagocytes to the peritoneum.

PERITONITIS.

The onset of inflammation of the peritoneum—peritonitis—is always a serious complication of any abdominal injury, disease, or operation. It is to be borne in mind that peritonitis is not a disease, but a symptom of many diseases. It is due to the action of micro-organisms, which reach the cavity either directly, or from the bowel, *e.g.*, as a result of perforation of the stomach, or of strangulated

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