

In the first series of cases surgical interference by incision or drainage ranks with the opening of a large abscess.

In the second series the incision, flushing and drainage is comparable to washing out the stomach after an acute poison has been taken.

In the one case we have to get rid of the products of a limited inflammation; in the other we have to rid the cavity of a poison which has already done much harm and is causing a progressive poisoning.

In cases of localized purulent peritonitis an incision should be made into the collection by the most direct route. When the pus has escaped, a drainage tube is passed to the bottom of the cavity and a dressing of some absorbent material applied.

Treeves says that he has seen no advantage attend either the fuller evacuation of the pus by squeezing or immediate irrigation of the cavity, that he is confident harm may be done by scraping the wall of the enclosure, by persistent searching for a diseased appendix or other cause of trouble, and by stuffing the exposed space with gauze. At the end of twenty-four or thirty-six hours irrigation of the cavity may be commenced and continued twice daily, and now and then a little iodoform emulsion introduced.

Gilbert Barling, of Birmingham, in the *British Medical Journal* of last January, reports eleven operations with four deaths. In summing up, he says: "Incision in the middle line, irrigation and drainage is a simple procedure and carries with it little risk, and it is a question whether it is resorted to as often as it should be. The profession is, perhaps, fully alive to its advantages, when a very acute onset such as perforation can be recognized; but when the commencement is less acute and the symptoms less alarming in the early days, then I doubt if drainage is adopted as often as it is called for. When the inflammatory collection is localized it is well not to do too much. Simple incision and drainage suffices; anything like forcible irrigation or searching about with the fingers by disturbing limited adhesions is likely to do harm." He says that if a perforative focus is discovered it should be dealt with directly, and even if an incision has been made over the appendix, at the same time median section should be performed for irrigation and drainage of the general cavity.

In cases of generalized peritonitis the procedure adopted must depend upon the cause and degree of the trouble. If the exudation be serous, Treeves says it will suffice if the fluid be evacuated, the peritoneum dried in the most dependent parts with gauze sponge and the abdomen closed without drainage.

When the exudation is sero-purulent or purulent it is in most cases desirable that the cavity be irrigated after washing the depths of the peritoneal cavity and dried as far as possible with sponges, iodoform powder dusted over the portion of the serous membrane most involved, a long drainage tube introduced and the abdominal wound closed. Any treatment directed against the cause of the peritonitis will be independent of these measures.

There are cases in which the peritonitis is more plastic in character. The intestines are found matted together with greyish lymph, which may be present in considerable quantity. The breaking down of these adhesions is certainly distinctive of a desirable process of repair. Still, when it is indicated that the cause of peritonitis has to be searched for and imprisoned exudation between the intestinal coils to be set free, this freeing of adhesion must to a certain limited extent be carried out. A stump of adherent intestine will often cover and protect a perforation, and the lymph close it with much more speed and security than sutures. Treeves says, "As the surgeon reaches what appears to be the starting-point of peritonitis (plastic), he must proceed with the utmost caution, and be not only prepared but inclined to have the actual *fons et origo mali* undemonstrated."

The main purpose of the operation is to allow a noxious exudation to escape, and if possible free the peritoneum of the cause of trouble. Some of the best results in perforated peritonitis have been obtained in instances in which the exact site of the perforation was never ascertained. Kaiser gives six examples with five recoveries.

In this class of peritonitis neither drainage nor irrigation seem to be regarded. The peritoneum is dried with gauze sponges and iodoform dusted over the serous membrane most affected. I will say nothing on the technique of the operation, as Dr. Pucrot's able paper is fresh in our minds.

*Irrigation.*—The subject of irrigation in peritonitis has received much attention. So many ques-