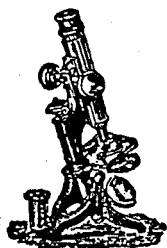


## Medical Matters.

### ON THE CONTINUOUS ADMINISTRATION OF FLUIDS BY THE RECTUM IN THE TREATMENT OF ACUTE GENERAL PERITONITIS



Mr. B. G. A. Moynihan, F.R.C.S., Surgeon to the Leeds Infirmary, describes in the *Lancet* his experience of the method of treatment of diffuse septic peritonitis advocated by Dr. Le Conte, of Philadelphia, by the means of introducing large quantities of fluid into the rectum, which he had witnessed in the clinic of Dr. J. B. Murphy, of Chicago. Mr. Moynihan says, in part:

I have come to the conclusion, after a fairly large experience of it, that there are few recent therapeutic measures which are in value equal to this. I have up to the present time treated 19 consecutive cases of acute general peritonitis due to appendicitis with two deaths, and the recovery of several of these patients is, I believe, largely, if not solely, due to the continuous administration by the rectum of saline solution over a period of two to four days after the operation. But it is not only in such cases that I have found this method of value. In two recent cases of partial gastrectomy and in one case of complete gastrectomy the recovery of the patients was undoubtedly helped by this abundant supply of liquid to them. I propose to describe briefly the method of administration which I have found the most useful and shortly to add the details of a few cases in which I have adopted it.

The first point is concerned with the selection of a proper rectal tube. To find a perfectly satisfactory one is no easy matter. The patient during the administration of the infusion is generally propped up in bed, and if a short solid tube is used the rubber tube attached to it is apt to kink. I have used in all my recent cases a tube one foot in length and half an inch in diameter, made of pewter, with a slightly bulbous extremity which is introduced into the rectum. The tubes are supplied to me by Messrs. Allen and Hanburys. At the end and on all sides of this bulb holes are pierced so that fluid can easily pass through them and flatus can escape and can be seen bubbling through the supply tank or funnel. If a single aperture only is present in the tube it is apt to be blocked by faeces. When there are many openings the rectum is equally distended above the sphincter and the obstruction of the flow of fluid by faeces does not occur. The tube is introduced about from two to three inches into the rectum, and at the

anus it is bent sharply so as to lie easily on the bed. To its outer end a long rubber tube is attached, which leads to the source of supply at the bedside. The most convenient vessel to hold the saline solution is an "infusion flask" (Sahli's pattern). This is of the type of a Florence flask, but instead of being globular it is triangular in shape, having a large base. The flask holds from three to four pints and is closed at its neck by a rubber stopper, through which there are three openings; the one admits a glass-tube, which at one end reaches to the bottom of the flask, and at the other is attached to the rubber-tube leading to the rectum; a second admits a thermometer; and a third a tube which acts as an inlet for air. The whole glass flask is immersed in a bath of hot water, beneath which a spirit lamp burns. This secures an equable temperature of the saline solution. The best temperature is from 100 degrees to 102 degrees Fahr. If the fluid is hotter than this it is not retained well; its temperature is probably three or four degrees lower than that shown by the thermometer when the rectum is reached. When the tube has been introduced into the rectum and the flask attached the latter should be elevated so that its base is about from three to six inches higher than the rectum. The saline begins to flow and continues to flow at the rate of about a pint an hour. It is not desirable to introduce more than one and a half pints, or at the most two pints, during the first hour; subsequently a rate of one pint in the hour should be maintained. The rapidity of the flow is altering by raising or lowering the flask. It should be regulated by the patient's comfort. If a feeling of tightness or distress is caused the flow is too rapid. As a rule no uneasiness is caused till about five pints have been introduced. It may then be necessary to retard the flow for half-an-hour or an hour, or even to stop it for a few minutes. In only one case has less than five pints caused distress. If the rate of flow be regulated properly, and the temperature of the fluid not altered, from seven to ten pints can be introduced without any interruption. If flatus reaches the rectum it can escape by the tube. If, as rarely happens, the fluid introduced acts as an enema the tube may be replaced as soon as the bowels have acted. Care and almost constant attention on the part of the nurse are necessary to make the administration a success; a marked difference in the capacity of nurses will probably be discovered by all who try the method. In place of the infusion flask a funnel may be used which the nurse must keep filling from a jug. This is tedious and a variation in the temperature of the fluid is inevitable.

[previous page](#)

[next page](#)