



Peritoneal Dialysis In General Purulent Peritonitis

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Abstract

The author describes an improved them way flow peritoneal dialysis with a general purulent peritonitis, which allowed him to 3.5 times reduce mortality in this disease (88.8% to 22.4%). For the success of the dialysis he uses fat liquors and alternation of drip and Jet different fluids in the abdominal cavity. Technique deserved careful study and application in the clinic.

Keywords: General purulent peritonitis; Peritoneal dialysis; Drainage

Introduction

At the present stage of development of medicine General peritonitis treatment remains one of the most difficult problems in emergency abdominal surgery [1, 2]. Mortality in the form of peritonitis reaches 88-90% [3, 4, 5]. This is due both to the huge area of local inflammatory tissue lesions, and the difficulty of developing a total correction of violations homeostasis [6, 7, 8]. In the literature of some importance in the treatment of General purulent peritonitis peritoneal dialysis is given [9, 10]. However, dialysis techniques described, provide 3-d abdominal irrigation only during 5-6 hours and then it develops adhesive process. This is accompanied by sekvestraciej input fluid and dialysis was forced to cease. For this reason, preference in the treatment of this complication steel give programmed relaparotomy [11, 12, 13]. In view of these negative factors, described methods of dialysis, we have developed a way to prolonged irrigation of abdominal cavity in this disease. It is based on the use of fatty emulsions, entered intraperitonealno and on the combination of lavage with

dialysis. On the efficiency correction of homeostasis, it turned out to be the same as the known methods of extracorporeal blood plasma purification from toxins and nedookislennyh products.

Material and methods

Before application in clinic treatment method, as described below in General purulent peritonitis, we have conducted experiments on 47 Mongrel dogs and 430 white rats. It was found that when fat emulsions introduce them into the abdominal cavity, not burden for peritonitis, and do not cause it education no adhesions nor abscesses. Histological studies showed that the peritoneum tiny droplets of fat cause it expressed by the proliferation of histiocytes. Among them there are a large number of fat cells, loaded with heparin, which not only hindered the development of the process, but also contributes to the Elimination of emerging adhesions. These studies have allowed applying fat emulsions in the clinic. Next was developed way of peritoneal dialysis in General purulent peritonitis. After the completion of the

readjustment of the abdominal cavity, it injected 5 drainage tubes through the holes of the anterior abdominal wall (Figure A).

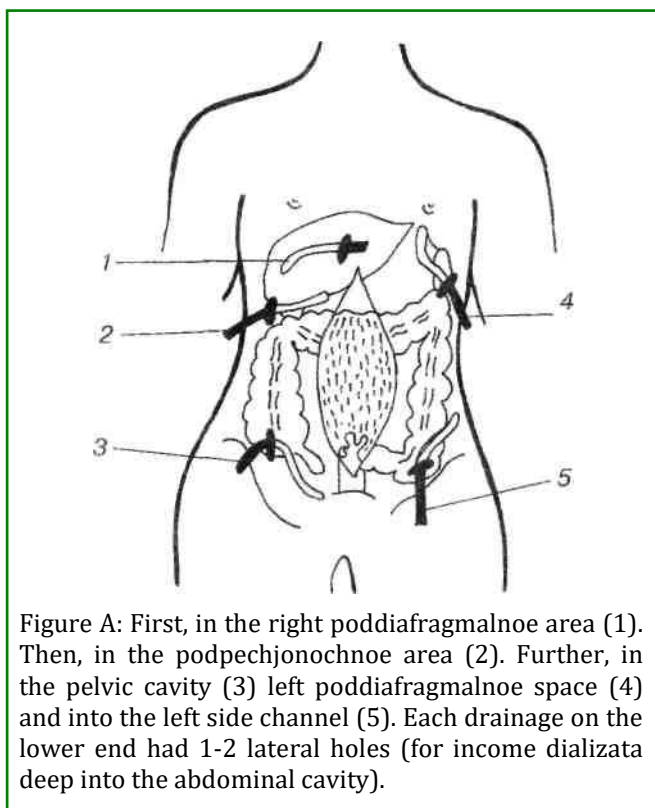


Figure A: First, in the right poddiafragmalnoe area (1). Then, in the podpechjonochnoe area (2). Further, in the pelvic cavity (3) left poddiafragmalnoe space (4) and into the left side channel (5). Each drainage on the lower end had 1-2 lateral holes (for income dializata deep into the abdominal cavity).

At the ends of the drainages superimposed clips. Then the abdominal cavity poured 100-200 ml of fat emulsion, which reviews for parenteral nutrition (the most commonly used lipofundin). Median wound closed tightly. After delivering a patient from the operating to the intensive care unit, immediately began to conduct peritoneal dialysis, while every drip 4:00 maintenance dializata interrupted Jet introduction of various liquids, i.e. dialysis combined with lavazhem. This stripping speed of fluids, is fundamentally important aspect of the whole procedure of this treatment. Necessary and pedantic control of balance washing Wednesday-derived dializata it should be or if it is equal to the fluid imposed or slightly more. If dializata will be less, it testifies to the sequestration of fluid in the abdominal cavity and this leads to a brain oedema. After delivering a patient to the intensive care unit, two lower ends of tubes lowered into a measuring container, which are located below the level of the bed (to avoid artificial fluid in the abdomen) and to three top drainage align system for intravenous fluids. The procedure starts with the first cycle-with a Jet in the abdominal cavity (through all three top tube) mix solution furazilina (1:5000) with 3% hydrogen peroxide solution,

using 300-350 ml furazilina and 100-150 ml of hydrogen peroxide.

Immediately from the lower tubes starts foaming liquid spill struino. Via 3-5 minutes in the same mode instillirruut 300-500 ml 5% glucose solution or 500-1000 ml kristalloidnogo complex solution. Once terminated, the Jet perfuzata selection from the abdominal cavity (usually this happens via 10-15 minutes) start to second cycle-drip introduction into the abdominal cavity 1.5% solution of salt or a more complex solution kristalloidnogo. This cycle continues 4:00. Then again carry out Jet infusion of the above solutions and so during 2-5 days (up to a strong recovery in the patient of intestinal peristalsis). During the second cycles 2-3 times daily perfuzata composition included antibiotics (taking into account the sensitivity of the microflora to them), as well as 300-500 ml 5% glucose solution and 100-150 ml of fat emulsion. This reinforces the sorption of toxins from the abdomen (due to increased osmotic perfuzata capacity) and monitors the progression of the process in the abdominal cavity.

All patients all the listed solutions easily entered and withdrawn from the abdominal cavity. For the day was dializata to 2-3 a liter more than imposed liquid i.e. There was an influx of water and the endogenous metabolic products from the internal body Wednesday in the abdominal cavity. The described technique peritoneal dialysis was applied from 58 patients with General purulent peritonitis. The age of the patients was from 16 to 83 years and men-37 people. The duration of the disease ranged from 1 to 3 days. This complication has developed the following diseases: 20 patients-destructive acute appendicitis (3 deaths), 8-inflammation of the uterine appendages (d. 1), 6-perforated ulcers gastroduodenal zone (1), 6-closed abdominal trauma (2 died)-6 insolvency seams anastomosis (died 2), 4-acute ileus (d. 1), 4-segmental colon necrosis with nonspecific ulcerative colitis (3 deaths), 3-acute gangrenous cholecystitis, 1-spleen abscess. All patients carried out intensive corrective medical therapy.

The result of the 58 patients died (22.4%). 13 in the control group mortality amounted to 88.8%. patients died from severe concomitant diseases and the nature of the underlying pathology that caused peritonitis development. For example, nonspecific ulcerative colitis patients died from advanced colon necrosis, although it originally was performed by resection of the affected intestine. Deaths in acute appendicitis have been linked to autoimmune destructive lesions of the vermiform process. Both patients with closed abdominal trauma died from liver damage, and in insolvency seams anastomosis from acute cardiopulmonary failure. The cause of death

was the same with other diseases. From surviving 45 patients, complications were observed in 27 (60%), including: 18 (40%)-wound festering, 5 (11%)-pneumonia, 4 (9%)-deep vein thrombosis. Duration of treatment in hospital was from 45 to 91 days.

Discussion

None of the patient treatment technique did not become the cause of death. A high percentage of postoperative complications in the form of a festering wound (60%) can be explained not only by the massive trauma of tissues of the anterior abdominal wall but a sharp decrease in patients. Perhaps this decline occurred before the development of a general purulent peritonitis and that was the reason for his development. During dialysis, the patients did not experience any noticeable discomfort on the part of the abdomen. Fat emulsions, vlyte intraperitonealno, turned the peritoneum in all its departments in the true polunepronicaemuju membrane needed for dialysis because dializat had unhindered contact with it. Alternating Jet and drip infusion fluids provides washout from the abdominal cavity accumulating purulent detritus and products as well as prevents the bonding between a parietal and visceral peritoneum which typically occurs through the if 4:00 paralysis of the motor activity of the intestine.

Restoring same peristalsis shows that the correction of homeostasis but to not relapse pathology, dialysis need to continue 10-12 more hours to counter the stabilization of homeostasis. Treatment of exercise under the supervision of the deployed biochemical research. However, without comprehensive drug therapy, including in its composition not only antibiotics and plasma (up to 2 liters), but editors and immune effect of this method of treatment is impossible. For this reason, peritoneal dialysis need attributed to highly expensive treatments that require not only appropriate equipping of medical institutions, but also the training of medical personnel.

Conclusion

Use FAT emulsions when performing peritoneal dialysis hinders development in the abdominal cavity of adhesive process. They allow for a long time (up to 5 days or more) to take this treatment seeking correction of homeostasis. A combination of dialysis with lavazhem can improve the results of treatment of General purulent peritonitis. This is achieved by increasing the drainage of the abdominal cavity, and rapid recovery of motor-evacuation function of the intestine. The method involves a complex application consisting of corrective medical therapy. It reduces mortality in this disease in Grozny 3.5 times.

The purpose of the study

Reflect the clinical significance of circulating dialysis when General purulent peritonitis.

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