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Indications for intubation of the small intestine with peritonitis

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We highlighted the problems associated with intubation of the small intestine in patients with peritonitis. Prolonged decompression of gastro - intestinal tract with using through probe therapeutic effect on colon is feasible and effective component in the treatment of peritonitis and acute intestinal obstruction. Development enteroplegia peritonitis accompanied by pronounced motor evacuational disturbances with the development of enteral insufficiency syndrome, effective treatment is to intubation intestine.

Keyword: Peritonitis, Intestinal Intubation, Treatment.

1. Introduction

The problem of surgical treatment of patients with peritonitis remains one of the most difficult in emergency abdominal surgery. Mortality in these diseases remains high and not tends to decrease [1, 2]. Although aspects of purely surgical treatment of this pathology developed thoroughly, but at the same lack of attention to this terrible complication, as intestinal atony. In this category of patients because of severe violations of motor evacuational function of the gastrointestinal tract occurs syndrome, called enteral insufficiency [3]. An important pathological mechanism for this is bacterial translocation - the penetration of pathogenic microflora in the lymph channel, portal system, and later in the systemic circulation with subsequent initiation of systemic inflammatory response and "mediator cascades" that lead to disruption of the structure and functions of all vital organs and human systems.

Inhibition of intestinal motor function in violation of the enzymatic activity of intestinal juice leads to a change in the microflora and the emergence of new toxic products of their development, which enhances paresis and hypoxia of bowel and ultimately leads to multiple organ failure.

Thus, a major and effective therapeutic measures for this disease and its manifestations are pre-and intraoperative evacuation of intestinal contents.

The purpose of the study. Create algorithm for decompression of the gastrointestinal tract and small bowel intubation in peritonitis.

2. Materials and Methods

In our clinic over the past 5 years Intraoperative intubation of the small intestine in peritonitis conducted in 101 patients. For bowel intubation using plastic probes produced in Kamenets-Podolsk.

1. Indications for intubation of the small intestine consider:
Diffuse peritonitis, in which purulent exudate extends to several areas of the abdomen with marked presence of fibrin layers;
2. Expansion of more than half the length of the small intestine 4 or more inches in diameter, is full of liquid contents and gases;
3. The presence of transverse dark blue stripes under the serous membrane, bleeding in the intestinal wall, diastatic breaks of serous membrane;

4. Absence of peristalsis of intestine after warming and novocaine blockade of the root of mesentery;
5. Expressed the adhesive process, when the allocation of bowel adhesions is accompanied by prolonged and substantial injury to the wall, visible venous congestion and lymphostasis;
6. Resection of the bowel with interintestine anastomosis or stitching defect bowel wall in peritonitis and conditions of severe paresis.

There are reports on whether the drainage not paretic small bowel in gastrointestinal bleeding (for bowel cancer from blood), in operations on the spine and the abdominal aorta (for the prevention of postoperative paresis), with elective surgery for the colon to prevent failure interintestine anastomosis [4, 5]. Put in stoma we treat negative.

Tasks intubation of the small intestine was considered: intestinal decompression, evacuation of its toxic contents, the introduction of drugs, supplements, sometimes creating a "framework" to prevent adhesions of intestinal loops in a disadvantaged position for passage. One-off Intraoperative decompression of the small intestine has low efficiency in the elimination of enteral insufficiency. More effective is prolonged decompression of the small intestine.

In 98 patients applied antegrade manner bowel intubation. Among them were 30 patients with peritonitis spill (12 - on the basis of destructive appendicitis, 5 - on the basis of destructive pancreatitis, 3 - perforative ulcer of the stomach and duodenum, 3 - thrombosis of mesenteric vessels) and 68 patients with acute intestinal obstruction. Nazohastrointestynalnyy probe was carried out before the ileocecal angle, were evacuated with the help of electric pumps intestinal contents. For intestinal lavage using physiological solution of sodium chloride, a weak solution of potassium permanganate.

In the postoperative period in 52 patients to therapeutic effects of compromised gut conducted enteral lavage: 2 - 3 times a day through a tube fractional injected at 150 - 200 ml saline. At 5 - 10 minutes blocked tube, and then opened it for the passive outflow. In addition, the small intestine was injected drugs antimicrobial action (ampicillin for 1.0 to four times a day).

The probe was removed at 5 - 7 days after surgery in restoring motor evacuational bowel function. In 5 cases were recorded difficulty in removing the probe. In 6 patients have complications associated with prolonged intubation antegrade gut: the 3 - tracheitis exacerbation in one - and one exacerbation of rhinosinusitis - pneumonia.

Contraindications to the use of intestinal intubation think: old age, severe general condition of the patient, obesity, disease and pharyngonasal airways, significant adhesive process in the upper abdomen, hemodynamic instability at the time of surgery and its process (reduction of systolic pressure <90 mm.rt.st.). In 12 cases, failed to probe through the nose into the small intestine. Especially difficult venue for a probe is duodenum. Difficulty of increased in patients who had undergone previous operations on the top floor of the abdominal cavity.

Retrograde way through the small bowel intubation blindgutstomu used in the 1st patient. This patient had absolute indication intubation of the small intestine, but antegrade bowel intubation failed to hold. We believe that indications for the retrograde intubation of the small intestine: are the patient's advanced age, presence of severe respiratory diseases, the presence of massive planar adhesions in the upper floor of the abdomen, the need for a long stay in the probe lumen of the intestine to ensure the frame function.

The effectiveness of small bowel intubation ascertained in 95 patients. Four patients died: 2 - with intestinal obstruction (progression of peritonitis, intoxication), one - with perforative duodenal ulcer (bacterial shock, intoxication), one - with mesenteric thrombosis (progression of underlying disease).

Errors that may occur during intubation of the small intestine:

- Using a probe with low-quality material (soft), which creates difficulties in passing the duodenum;
- Small diameter and lack of holes;
- Incorrect statement of the probe (bend, no holes in the stomach);
- Not enough proper care (obturation intestinal contents, active suction aspiration leads to bowel wall and its necrosis, prolonged staging probe).

As a result, there are complications during intubation of the intestine - is the accusation of intestinal contents in the oropharynx, bed sores, bleeding, necrosis of the bowel wall with subsequent peritonitis

3. Conclusions:

1. Prolonged decompression of gastro - intestinal tract with using therapeutic effect by probe on colon is feasible and effective component in the treatment of peritonitis and acute intestinal obstruction.
2. Intubation intestine should conduct antegrade route.
3. Develop of enteroplegia peritonitis accompanied by pronounced motor evacuational disturbances with the development of enteral insufficiency syndrome, one of the most effective methods of treatment which is intestinal intubation.

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