

CORRECTION OF THE IMMUNE STATUS OF PATIENTS IN THE COMPLEX TREATMENT OF INTESTINAL OBSTRUCTION COMPLICATED BY PERITONITIS

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ABSTRACT

In complex treatment with the use of antibiotic therapy remains an important link, aimed at preventing and treating peritonitis. As a pathophysiological method of treatment is the use of endolymphatic and lymphotropic antibiotic therapy in the complex treatment of diseases of the abdominal cavity.

KEYWORDS

Complex treatment, aimed at preventing and treating peritonitis, concomitant pathology.

INTRODUCTION

In complex treatment with the use of antibiotic therapy remains an important link, aimed at preventing and treating peritonitis. As a pathophysiological method of treatment is the use of endolymphatic and lymphotropic antibiotic therapy in the complex treatment of diseases of the abdominal cavity.

Cases of description of the combined use of the immunomodulator T-activin, dioxidine solution for washing the abdominal cavity, for detoxification

therapy as a sorbent used stone adsorbed angle, lymphotropic antibiotic therapy for intestinal obstruction complicated by peritonitis available literature has been little studied, then served as the basis for this work.

Material and methods of research. For the period from 2014 to 2024, 98 patients with intestinal obstruction complicated by peritonitis were admitted to the surgical department of the Andijan State Medical

Institute and the emergency surgical department of the Andijan District Central Regional Hospital. There were 61 men (62.2%) and 37 women (37.8%) aged 16 to 80 years. When making a diagnosis, we used the classifications of K.S. Simonyan (1971) and Kuzin (). Local peritonitis was in 45 (46.0%), diffuse in 36 (36.7%), and diffuse in 17 (17.3%) patients. The cause of peritonitis in 71 patients (72.4%) was adhesive obstruction, in 21 (21.4%) - abruptional, in 6 (6.1%) - postoperative thrombosis. Patients with peritonitis were divided into 3 groups according to the type of treatment received. 15 patients of group 1, who received traditional treatment, were administered drugs subcutaneously, intramuscularly, intravenously and correction of concomitant pathology.

Patients of group 2 41 simultaneously with traditional methods of treatment after surgery were washed abdominal cavity with solution of dioxidine and physiological solution and also used qualities of sorbent bone adsorbed angle (BAA).

Group 3 included 42 patients in the complex of therapeutic measures of which additionally included lymphotropic administration of 10 mg T-activin.

Technique of lymphotropic therapy of drugs is administered through a microirrigator, which is installed during the operation of the mesentery of the small intestine. First, 10 ml of 0.25% novocaine solution + heparin 5000 U, diluted with 5 ml of 0.25% novocaine + 1 ml furocemide + T activin 10 mg, diluted with 5 ml of 0.25% novocaine + a single dose of antibiotic.

Discussion of the results obtained We conducted a comparative assessment of the results of treatment with various methods for peritonitis according to immunity indicators.

In all three groups of patients with intestinal obstruction complicated by peritonitis, a reliable ($P < 0.002$) decrease in both the relative and absolute number of lymphocytes was noted at the time of admission.

During the treatment, the average level of lymphocytes in patients of all groups increased.

In patients of group 1, the relative content of lymphocytes was significantly increased only on the 7th day compared to that upon admission, averaging $25.02 \pm 1.16\%$ ($P < 0.005$). The absolute lymphocyte counts in patients of this group at discharge did not differ significantly from the values upon admission, remaining significantly ($P < 0.005$) below the norm, averaging 1864.24 ± 132.82 cells/ μ l. In patients of groups 2 and 3, the relative lymphocyte counts on day 4 was significantly higher compared to the values upon admission, averaging 26.05 ± 1.17 and 00.00 ± 0.00 ($P < 0.002$), respectively. The absolute lymphocyte counts in patients of group 2 increased slightly by the time of discharge, not reaching the normal values ($P < 0.002$) on average 1864 ± 132.82 cells / μ l, while the values of group 3 by this time were significantly higher than the values upon admission (2258.74 ± 79.58 cells / μ l), ($P < 0.004$).

During treatment, patients of group 3 showed a marked increase in the lymphocyte level on days 4-6.

In patients with intestinal obstruction complications of peritonitis, a 1.8-1.9-fold decrease in the absolute content of T lymphocytes was found. During treatment, a gradual increase in the level of T lymphocytes of varying degrees was noted, depending on the therapy used. In patients of group 1, the relative content of T-lymphocytes on the 4th day increased equally, averaging $52.89 \pm 1.57\%$ and $52.18 \pm 1.53\%$, respectively, and significantly ($P < 0.005$) differed from

the indicator upon admission ($P < 0.001$) and 1176.93 ± 44.50 cells/ μl ($P < 0.002$).

In patients of groups 2 and 3, although the absolute number of T-lymphocytes at discharge was significantly ($P < 0.002$) and ($P < 0.02$) below normal, the relative indicators fluctuated within the normal range, averaging $59.23 \pm 1.0\%$ and $62.57 \pm 1.36\%$, respectively.

The relative content of B lymphocytes in patients of all three groups was reduced by 1.4 - 1.5 times compared to those in healthy individuals.

The decrease in the absolute content of B lymphocytes was more pronounced than the relative one. In patients with acute peritonitis, the absolute content of B lymphocytes was 2.0 - 2.2 times lower than normal.

An increase in the level of B lymphocytes was noted during treatment. In patients of the first group, on the 8th day, both their relative and absolute content was significantly increased ($P < 0.05$) compared to the values upon admission, averaging $15.26 \pm 0.01\%$ and 310.12 ± 22.3 cells / μl . In patients of groups 2 and 3, a significant increase in the relative and absolute content of B - lymphocytes in relation to the values upon admission was noted on the 6th day ($P < 0.005$).

Upon discharge, in patients of groups 1 and 2, the relative and absolute content of B - lymphocytes was normal, and in group 3, only the relative number fluctuated within the normal range, averaging $15.72 \pm 1.1\%$.

A study of the content of zero cells showed that in all patients with acute peritonitis with intestinal obstruction, a reliable ($P < 0.005$) increase in the relative number of these cells is noted upon admission. Thus, in patients of group 1, the relative content of zero lymphocytes upon admission averaged $37.3 \pm 1.4\%$ and in group 3 $39.1 \pm 1.4\%$.

The absolute content of zero cells in patients with intestinal obstruction complicated by peritonitis, in contrast to the relative indicator, increased to a lesser extent and was 1.1-1.2 times versus 1.7-1.8 times. Thus, upon admission in group 1, an average of 687.8 ± 51.5 cells per 1 μl and 2713.5 ± 60.9 cells/ μl were recorded. During treatment, the level of zero lymphocytes tended to decrease.

In patients of group 1, the relative content of zero lymphocytes significantly decreased compared to the indicators upon admission on day 8, averaging $29.1 \pm 1.5\%$ ($P < 0.005$). In patients of groups 2 and 3, the relative and absolute content of zero lymphocytes significantly decreased compared to that upon admission on day 4 ($P < 0.05$).

At discharge, only in patients of groups 2 and 3, the relative and absolute number of zero lymphocytes was within the normal range.

In patients of group 1, the level of Jq A began to increase against the background of traditional therapy, and on day 4 it was significantly higher ($P < 0.005$) than the value upon admission, averaging 173.5 ± 4.1 mg%. On day 6, a significant decrease in the level of Jq A was observed at discharge, it did not differ from the value upon admission.

In patients of group 2, the level of Jq A gradually decreased against the background of the proposed treatment, and on day 7 it normalized. At discharge, the average content of Jq A was also within the normal range.

In patients of group 3, against the background of the proposed therapy, the level of Jq A gradually decreased and normalized on the 8th day, averaging 144.9 ± 5.9 mg%.

In patients with intestinal obstruction complicated by peritonitis, a sharp increase in the level of Jq M was noted upon admission.

In patients of group 1, the average content of Jq M was 207.3 ± 5.9 mg% ($P < 0.005$), 2 groups 216.7 ± 8.7 mg% ($P < 0.005$) and 3211.3 ± 7.9 mg% ($P < 0.005$), which is 1.6; 1.7 and 1.8 times higher than the normal value, respectively. In patients of groups 1 and 2, normalization of this indicator was noted on the 8th day (147.7 ± 0.02 mg% and 135.3 ± 4.8 mg%), respectively, in group 3, normalization of this indicator was observed on the 6th day (145.3 ± 5.5 mg%).

A study of changes in Jq Q depending on the type of treatment used showed that in patients of group 1, upon admission, the Jq Q level was increased to 1812.7 ± 73.9 mg% ($P < 0.005$); against the background of traditional therapy, a gradual decrease in this indicator was observed, but upon discharge, the Jq Q level was significantly increased compared to that in healthy patients, on average amounting to 1277.9 ± 68.6 mg% ($P < 0.05$).

In group 2, the Jq Q level decreased to 1256.7 ± 79.3 mg% and did not differ significantly from the indicator in healthy patients. In patients of group 3, the content of Jq Q was increased on average to 1865.5 ± 74.6 mg% ($P < 0.005$) upon admission, which, as in group 2, was 1.7 times higher than the indicator in healthy patients. During the complex treatment of patients, on the 6th day, the level of Jq Q did not differ significantly from that in healthy patients, averaging 1225.2 ± 73.7 mg%. Upon discharge, a stable normalization of this indicator was observed (1065.8 ± 51.6 mg%).

Indicators of nonspecific protection, as well as cellular and humoral immunity, were studied upon admission on the 4th, 6th, 8th days.

In patients of group 1, it tended to increase, but upon discharge it was insignificantly higher compared to the indicators upon admission. In patients of groups 2 and 3, a significant increase in this index was observed on the 6th day ($P < 0.05$).

The phagocytic number in patients with intestinal obstruction complicated by peritonitis upon admission was significantly lower than that in healthy patients ($P < 0.001$) averaging 2.6 ± 0.3 in group 1, 2.1 ± 0.1 in groups 2 and 2.3 ± 0.2 microns/cells in groups 3. In patients in groups 2 and 3, the phagocytic number on the 4th day after treatment significantly ($P < 0.005$) increased compared to the initial value and did not differ significantly from the norm.

The index of complete phagocytosis upon admission was significantly lower in all patients than in healthy patients. In patients in group 1, this index on the 6th day after treatment was significantly higher than the initial value and on the 8th day it approached that in healthy patients. In patients in groups 2 and 3, the index of complete phagocytosis on the 4th day was significantly higher than the initial value and fluctuated within the range of the indicator in healthy patients. The results of the study showed that the inclusion of its use with dioxidine solution for abdominal cavity lavage and lymphotropic antibiotic therapy in the treatment of patients has a stimulating effect on immunity indices and non-specific defense factors.

CONCLUSIONS

1) Immunity shifts in intestinal obstruction complicated by peritonitis, depending on the phase of the disease, the degree of prevalence of the process and the nature of the pathogen, are accompanied to varying degrees by a decrease in T and B cells in the peripheral blood, phagocytic index, phagocytic number, phagocytosis completion index with a simultaneous increase in the

number of zero lymphocytes and serum immunoglobulins A and Q.

2) Targeted lymphotropic antibiotic and immunotherapy with thymalin against the background of abdominal cavity sanitation with furacilin solution and dioxidine help to reduce the microflora contamination of the abdominal cavity and their resistance to antibiotics, increase the antibacterial effect and immune status.

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