

Research using immunological methods and modified
ART "IMEDIS TEST +" of the effect of the immunomodulator Polyoxidonium
on the parameters of the immunological blood test in an infected
biliary peritonitis

Yu.E. Rogovy, L.G. Arkhipova, I.L. Muravyova, A.V. Belookiy, V.V. Belookiy
(Department of Pathological Physiology of Bukovina State Medical
University, Regional Clinical Hospital, Chernivtsi, Ukraine; Centre
"IMEDIS",
Moscow, Russia)

Introduction

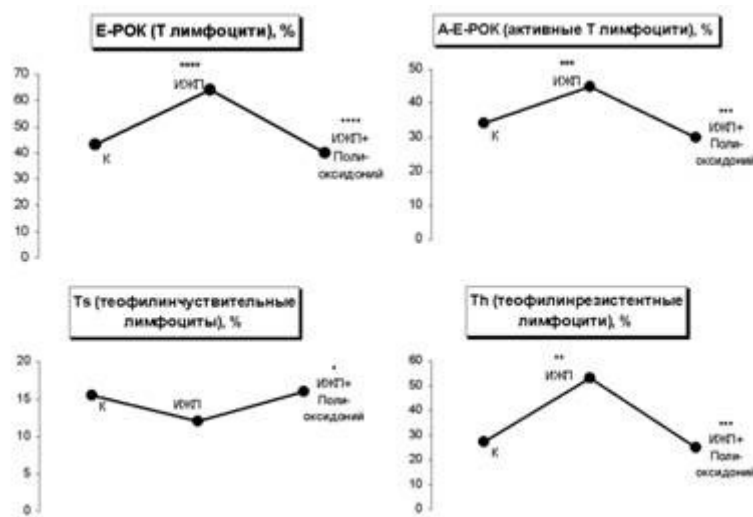
It is known that infected biliary peritonitis is characterized by a severe course (with purulent, biliary, fibrinous, mixed peritonitis); severe endotoxemia, dysfunction of internal organs at the level of subcompensation, which predetermines the need for preoperative preparation and intensive postoperative therapy. In addition, infected biliary peritonitis is observed with advanced, widespread (general diffuse, purulent, bilious, fibrinous, mixed) peritonitis; at the same time, the functioning of internal organs is in the stage of decompensation, which requires special measures both during the preparation of patients for surgery, when choosing a method of surgical intervention, and in the postoperative period [1, 3]. Factors of cellular and humoral immunity play a significant role in the pathogenesis of infected bile peritonitis [7]. In order to correct immunological disorders in infected biliary peritonitis, it is advisable to use the immunomodulator polyoxidonium.

Purpose of the study: to find out the effect of the immunomodulator polyoxidonium on indicators of immunological blood tests in infected biliary peritonitis using immunological methods and a modified vegetative resonance test (ART) "IMEDIS-TEST +".

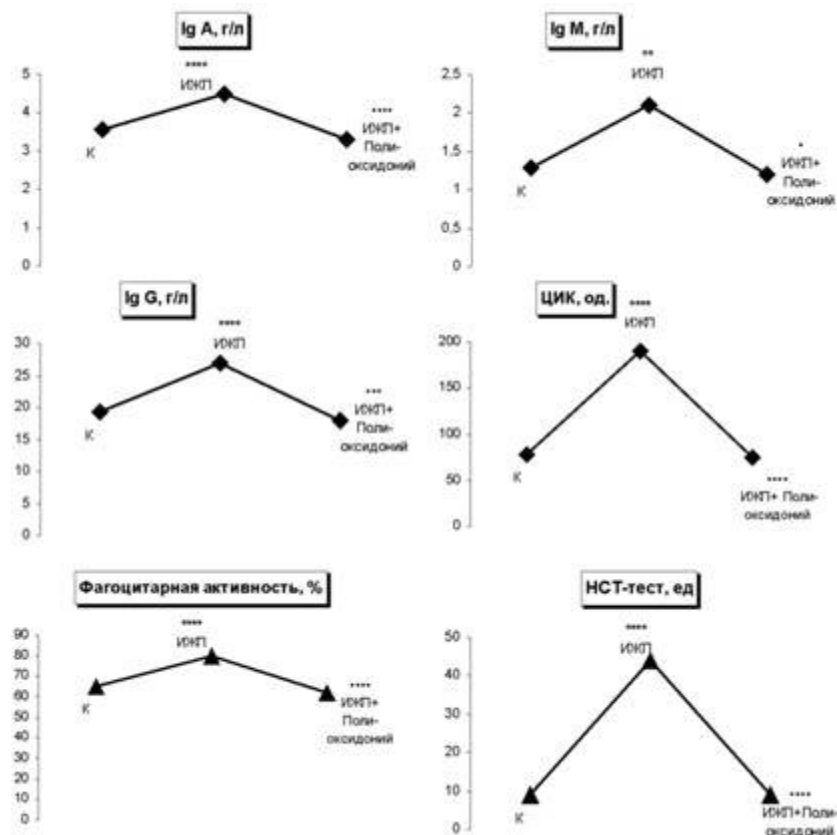
Material and methods

The study involved 41 patients with infected biliary peritonitis, aged from 28 to 74 years. Immunological blood parameters were determined: E - ROC (T-lymphocytes), A - E - ROC (active T-lymphocytes), T* (theophyllin-sensitive lymphocytes), Th (theophyllin-resistant lymphocytes), immunoglobulins A, M, G, phagocytic activity, NBT- test, circulating immune complexes [7]. All patients underwent surgical treatment taking into account the severity of the disease, which included cholecystectomy and a set of necessary measures [3]. In addition, all patients were prescribed the immunomodulator Polyoxidonium (azoximer bromide), 6 mg per 1 injection daily, starting from the second day of illness, for 3 days, and then every other day, the total course of treatment was 5–10 injections. In parallel, all patients were examined using ART "IMEDIS-TEST +" [2, 5].

Discussion of research results. In patients, the level of E - ROC (T-lymphocytes), A - E - ROC (active T-lymphocytes), Th (theophyllin-resistant lymphocytes) increased in infected bile peritonitis in comparison with the control. T* (theophylline-sensitive lymphocytes) were underestimated in the studied pathological process. The use of the immunomodulator polyoxidonium led to the normalization of the above parameters of the immunological blood test (Fig. 1). Immunoglobulins A, M and G, immune complexes, phagocytic activity and NBT-test increased in infected biliary peritonitis. The use of the immunomodulator Polyoxidonium led to the normalization of the concentration of antibodies, circulating immune complexes, phagocytic activity, NBT-blood test.



Rice. 1. The effect of the immunomodulator polyoxidonium on the parameters of the immunological blood tests in patients with the development of infected biliary peritonitis (ILP). The significance of the differences was noted: relative to control ** - $p < 0.02$; *** - $p < 0.01$; **** - $p < 0.001$; compared with infected bile peritonitis • - $p < 0.05$; •• - $p < 0.01$; ••• - $p < 0.001$.



Rice. 2. The effect of the immunomodulator polyoxidonium on the concentration of antibodies, circulating immune complexes (CIC), phagocytic activity, NBT-test in patients with the development of infected bile peritonitis (IPP). The significance of the differences was noted: relative to control ** - $p < 0.02$; **** - $p < 0.001$; versus infected with bile peritonitis • - $p < 0.05$; *** - $p < 0.01$; **** - $p < 0.001$.

The revealed changes in the immunological status in infected bile peritonitis and the results of its correction with the immunomodulator Polyoxidonium are fully confirmed using the ART "IMEDIS-TEST +", which, in comparison with the above tests, has wider possibilities regarding the determination of the state of adaptive reserves, the level of acidity and alkalinity, anabolism and catabolism, viral, bacterial and mycotic burden, the state of the meridian of the lymphatic system (toxic burden, tension or inhibition of the drainage properties of the lymph), the level of the biological index, bactericidal activity, the state of bioresonance to the organ, bacterial or pathomorphological nosode.

The mechanism of development of infected bile peritonitis is explained by infection of bile with the development of phlegmonous cholecystitis with the entry of purulent or bile exudate into the abdominal cavity. The entry of bile into the abdominal cavity led to damage to the intestinal wall with its paralytic expansion. This contributed to the development of dysbiosis in the lumen of the small and large intestine [1, 6] and excessive intake of bile

acids, endotoxin into the portal vein.

These changes contributed to a significant increase in the reactivity of the immune system with an increase in the blood level of E - ROC (T-lymphocytes), A - E - ROC (active T-lymphocytes), Th (theophilin-resistant lymphocytes), phagocytic activity, NBT test, circulating immune complexes ... An insignificant increase in immunoglobulins M and G and secretory immunoglobulins A in infected biliary peritonitis indicates the beginning of the transition of the primary immune response to the secondary [7], which can further lead to depletion of the reserve capacity of the immune system with the onset of immunodeficiency [3]. In particular, this is damage to the intestine and liver, which creates conditions for the maximum manifestations of the translocation syndrome in relation to the flow of endotoxin, microflora, secretory Ig A from the intestinal lumen, the abdominal cavity into the blood [1, 3, 4]. This explains the increase in the concentration of Ig A in the blood against the background of the development of immunodeficiency under conditions of infected bile peritonitis. The use of the immunomodulator Polyoxidonium led to the normalization of the concentration of antibodies, circulating immune complexes, phagocytic activity, NBT-blood test, regardless of whether activation or inhibition of the immune system was observed, which indicates the prospects of its use as an effective corrector of the immune system.

Conclusions:

1. The tension of the reserve capabilities of the immune system during infected bile peritonitis is characterized by the formation of a secondary immune response and the creation of prerequisites for the onset of the development of immunodeficiency.

2. The use of the immunomodulator Polyoxidonium led to the normalization indicators of cellular and humoral immunity, phagocytic activity, NBT-blood test in patients with infected bile peritonitis, regardless of whether there was an activation or inhibition of the immune system, which indicates the prospects of its use in the clinic as a corrector of the immune system.

3. Taking into account the high efficiency of the immunomodulator Polyoxidonium, absolute safety and harmlessness, absence of contraindications for use and side effects, which was confirmed by objective immunological methods and with the help of ART "IMEDIS-TEST +", the prospect of further studies to clarify the effect of the immunomodulator Polyoxidonium in the clinic on indicators of immunological status in patients with a surgical profile was substantiated ...

Literature

1. Bilooky V.V. Analysis of the population ryvn of empty intestinal microflora for the minds of an experimental rutting peritonitis // Bulletin. sciences. doslidzhen. - 2007. - No. 4. - P.69-71.
2. Gotovsky Yu.V., Kosareva LB "IMEDIS-TEST +" is a new method of electro-acupuncture diagnostics and monitoring of ongoing therapy.

International Congress-cruise "Medicine of the third millennium" 10-14 June 2003, board of the motor ship "Princesa Dnipra", cruise Odessa-Kiev, 2003. - P.72-74.

3. Nechitailo M.Yu., Bilooky V.V., Rogovy Yu.Є. Peritonitis: pathophysiology and disease. - Chernivtsi: BDMU, 2011 .-- 296 p.

4. Patent 97619 Ukraine, IPC G 09B 23/28 (2006.01) Method of modeling of an infected rump peritonitis // OV Bilooky, FV Grinchuk, Y. Rogovy, VV Bilooky - No. u201410759. Appl. 02.10.2014 p. Chinniy from 25.03.2015. Applicant and vlasnik to the patent: Bukovynsk State Medical University. - Bul. No. 6.

5. Pat. 19909 Ukraine, IPC (2006) A61B 5/04 Methods for diagnostics instead of speech lines in tissues of organs of experimental animals: Pat. 19909 Ukraine, IPC (2006) A61B 5/04. Yu.Є. Rogoviy, V.P. Pishak, A.A. Ovsepyan, L.G. Arkhipova, I.L. Muravyova, O.V. Zlotar (Ukraine). - No. u200603588. Appl. 03.04. 2006 p; Publ. 15.01.2007, Bul. No. 1. - 2 p.

6. Savitskaya K.I., Vorobiev A.A., Shvetsova E.F. Modern ideas about the role and composition of microflora in healthy adults // Bulletin of the Russian Academy of Medical Sciences. - 2002. - No. 2. - pp. 50-52.

7. Stasenko A.A., Sanko V.F., Dibrova Yu.A. that in. Mycelium immunity of the herbal tract. - Kiev: Three specks, 2005 .-- 200 p.

Research using immunological methods and modified ART "IMEDIS TEST +" of the effect of the immunomodulator Polyoxidonium on the parameters of the immunological blood test in infected biliary peritonitis / Yu.Є. Rogovy, L.G. Arkhipova, I.L. Muravyova, A.V. Belookiy, V.V. White-eyed // XXIII International Conference "Theoretical and Clinical Aspects of the Application of Bioresonance and Multiresonance Therapy". - M. : IMEDIS, 2017 .-- pp. 29-34.

[To favorites](#)