**INTRODUCTION:** According to current theories psoriasis is complicated by recurrent herpes infection, which brings about the suppression of interferon production and suppressed T-cellular immunity. This necessitates carrying out the immune status correction in addition to specific antiviral therapy. With this in mind we undertook the evaluation of the clinical effectiveness of transfer factors in this group of patients with psoriasis who also suffer from recurrent genital herpes.

**OBJECTIVE:** The aim of this investigation was to study the effects of enhanced transfer factors in a complex treatment of patients with psoriasis and recurrent genital herpes.

**METHODOLOGY 1:** This study was initially conducted with 8 patients with exudative psoriasis, 5 children age 9-14 and 3 adults, ages 19-46. Four of these patients were manifesting dermatosis for the first time. All patients had widely distributed eruptions. Since traditional methods of treatment were not effective enough, we added enhanced transfer factors from bovine colostrum. The product was administered according to the following scheme: 4 capsules daily for 14 days and then 4 capsules twice a week for 14 days. The product was obtained from 4Life Research, USA. The clinical effectiveness of the product was evaluated.

**RESULTS 1:** By the end of the course of treatment 7 patients demonstrated a marked improvement of skin condition. We prolonged treatment in only one patient for an additional two weeks. This patient has suffered from psoriasis since 1998 and exhibited signs of arthropathy.

**METHODOLOGY 2:** We continued the study with an additional 9 patients, ages 18-38, with disease duration of 6 months to 5 years and that had suffered from severe (only several days to six weeks remission) or moderate severity (2 to 3 months remission) courses of the disease. During the recurrent course of the disease the majority of patients received antiviral (acyclovir) and non-specific immunomodulating drugs, biogenic stimulators and others, which in the majority of cases resulted in only a slight prolongation of the remission period. Enhanced transfer factors were given as a monotherapy to the patients during periods of genital herpes relapse according to the following scheme: 4 capsules daily for 2 weeks, then 4 capsules 3 times a week and in the following 2 weeks 4 capsules twice a week. The therapeutic effectiveness of the product was evaluated according to the duration of remission and the duration and severity of relapses as compared with the course of treatment without the use of transfer factors.

**RESULTS 2:** Seven of nine patients receiving transfer factors demonstrated stable anti-recurrent effects. Two patients had a relapse on the 2nd and the 4th weeks of the treatment, but it was of an abortive nature and did not affect quality of life. Pain acuteness in these instances was less pronounced than during the previous relapses. In the following 6 weeks the patients demonstrated stable clinical remission.

**CONCLUSION:** We concluded that the use of enhanced transfer factors in patients with psoriasis and recurrent genital herpes gave improved clinical results which prompts the expediency of further clinical studies.
INTRODUCTION: Included in this study were 25 HIV-infected patients (20 male and 5 female), ages 19 to 56 (15 patients ages 21-25). Individuals were classified according to V.I. Pokrovskys classification (1989) for HIV-infection. Eight (8) patients were diagnosed to have stage 2B, thirteen (13) patients were stage 2C, three (3) patients were stage 3A and one (1) was stage 3B. Infection periods were as follows: nine (9) patients were infected 1 year ago, four (4) were 2 years ago, four (4) were three years ago, six (6) were 5 years ago and two (2) were 6 years ago.

OBJECTIVE: The purpose of this study is to serve as an initial trial in evaluating the effects of enhanced transfer factors supplementation on HIV-infected patients.

METHODOLOGY: The experimental group (15 patients), who did not receive antiretroviral or immuno-correcting therapy, received enhanced transfer factors provided by 4Life Research, USA. They were administered one capsule twice a day for 7 days. The control group (10 patients) consisted of HIV-infected patients taking cycloferon in the following dosage schedule: 1st, 2nd, 4th, 6th, 8th, 10th, 12th and 14th days. Before treatment and 7 to 10 days after the treatment an evaluation was carried out to access the immune status of the patient groups and to determine cytokine (interleukin 1b (IL-1b), tumor necrosis factor (TNF-a) and g-interferon (IFN-g) levels.

RESULTS: In the experimental group, it was found that after treatment with enhanced transfer factors there was an increase of lymphocytes in 13 patients, an in crease of CD3 cells in 15 patients, an increase of CD4 cells in 14 patients and an increase in CD8 cells in 12 patients. Immuno-regulating index (IRI) persisted on the same level in 3 patients was increased in 10 patients and decreased in 7 patients. IgG was reduced in 16 patients and IgM was within normal limits in all patients. An increase of IL-1b and IFN-7 was noted in all patients treated with transfer factors. Circulating Immune Complex (CIC) levels dropped to normal levels in 10 of the patients. In the control group an increase of lymphocytes was noted in only 3 patients. A decrease of CD3, CD4 and CD8 cells was noted in 6 patients. IRI persisted on the same level or decreased. CIC levels dropped to normal in 3 patients, increased in 6 patients, there was no change in 1 patient. The occurrence of increases and decreases of IgG were equal.

CONCLUSION: We conclude that transfer factors therapy considerably improves the immune status of HIV-infected patients and can be recommended in combating the pathogenesis of the disease. Further studies are needed to determine optimal therapy, the necessity to repeat courses of the treatment, and the frequency of therapy needed.
ABSTRACT
Enhanced Transfer Factors in the Complex Treatment of Patients with Opisthorchiasis (liver flukes) N.V. Karbysheva, L.V. Sultanov, S.I. Belykh, C.McCausland, E.Oganova - Altay State Medical University, Barnaul Russian Federation; Altay Center for AIDS Prevention and Control

INTRODUCTION: Opisthorchiasis is one of the most prevalent and socially significant helminthisms in Russia. The Western Siberia Region is known to be among the most dangerous locations of opisthorchiasis in the world. The infection rate among the local population in this area is considered to be 70-80% and perhaps as high as 90%. Therefore, there is an urgent need to find a more effective treatment. Many investigators have expressed the necessity of correcting immune reaction imbalances in opisthorchiasis patients. Immuno-rehabilitation is recommended as part of the complex therapy needed in the treatment of opisthorchiasis, but the authors have not singled out a definite group of medicines among a vast number of immune modulators.

OBJECTIVE: To evaluate the effectiveness of enhanced transfer factors (provided by 4Life Research, USA) in the treatment of patients with chronic opisthorchiasis.

METHODOLOGY: The study examined 94 patients that were grouped as follows: Group 1 (experimental) included 50 patients who received enhanced transfer factors. Group 2 (control) included 44 patients. In order to evaluate the obtained data we also examined 75 opisthorchiasis-free donors. All patients underwent antihelminthic therapy with bilthricide (Bayer company) according to the following scheme: 75mg/kg body weight three times orally per day. Of these, 50 patients (Group 1) received 2 capsules of enhanced transfer factors 3 times daily for 7 days after antihelminthic therapy. The 44 patients in Group 2 were matched to patients in Group 1 by sex, age and clinical manifestations and received bilthricide therapy. In both groups all the parameters to be investigated were defined and measured before therapy, 2 weeks after beginning therapy and 3 months after discontinuation of therapy. Follow-up was conducted with all patients at 6 months. RESULTS: The follow-up revealed that enhanced transfer factors is well tolerated. Patients in Group 1 had no occurrence of asthenovegetative syndrome or increase in the frequency of intensified pain in the right hypochondrium, which is common after bilthricide treatment. Three months after treatment the morbid manifestations of hepatobililiary system were observed only in Group 2. Arthralgia and vasculitis occurred in both groups, but the number of such patients decreased in Group 1 and remained unchanged in Group 2. Immuno-correction was manifested in the highest degree 6 months after treatment. All 12 patients with arthralgia in Group 1 experienced convalescence while in Group 2 only 4 of 13 convalesced. Of those in Group 1 with vasculitis 7 of 9 convalesced, whereas, none of the 6 with vasculitis in Group 2 convalesced.

CONCLUSION: The use of enhanced transfer factors in the complex therapy of opisthorchiasis resulted in more complete patient convalescence within the six month period. The results of the study demonstrate the clinical and immunological effectiveness of enhanced transfer factors. Its use promotes activation of the monocyte-macrophage link, which is defined by the increase of IL-1b, TNF-a and especially IFN-g concentration leading to the induction of the second phase immune response with the formation of the specific protective immunity. Immuno-rehabilitation by enhanced transfer factors following dehelminthization with bilthricide promotes quick elimination of opisthorchiasis antigens thus preventing the development of other immunopathologic processes. It also promotes elimination of chronic opisthorchiasis and generally results in complete and early recovery. In our view it is advisable to use enhanced transfer factors in the complex therapy of patients with this invasion.
Effectiveness of transfer factors (TF) in the Treatment of Osteomyelitis (bone infection) Patients

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INTRODUCTION: The experience of studying chronic osteomyelitis, one of the most protracted and severe infections, testifies to the leading role of free radical and peroxide oxidation reactions with lipids and proteins in the pathogenic mechanisms of the disease and immune deficiency formation in patients. Being a purulent (pus forming) inflammatory process, osteomyelitis is characterized by intensified free radical and peroxide processes, disturbed membrane function and boy intoxication.

OBJECTIVE: The aim of this investigation was to study the TF products effectiveness in a complex treatment of chronic osteomyelitic patients. The transfer factors product was obtained from 4Life Research, USA.

METHODOLOGY: Patients with different forms of osteomyelitis were divided into 2 groups: experimental (20 patients) and control (13 patients). The standard method of treatment was comprised of surgery with the aim of removing the purulent infection and administering wide spectrum antibiotics (gentamycin, ampiox, etc.) in the postoperative period. The experimental group (20 patients) in addition to surgery and standard antibacterial treatment received 2 capsules of TF 3 times daily. The control group (13 patients) matched by nosological classification, sex and age received conventional therapy. Laboratory analyses and clinical investigations were carried out before, one week after surgery and one month after the complex treatment and included clinical, biochemical and immunological evaluations.

RESULTS: The use of transfer factors in the complex treatment of osteomyelitis proved beneficial in the treatment of disease. The product was found to increase the effectiveness of the ascorbate and thio-disulfide antioxidant system (AOS) links and normalize functional activity of the AOS enzymes. In complex osteomyelitis the use of the TF product was shown to decrease peroxidation of lipid and protein structures and to product a membrane-stabilizing effect. Changes in the humoral immunity link, characterized by an increased product of IgA, and stimulation of the phagocytic immunity link, without a noticeable increase of circulating immune complex (CIC) level, were also established.

CONCLUSION: The data obtained showed that in osteomyelitis enzymatic and low molecular antioxidant links of the body defense system as well as cellular systems membranous mechanisms were the first elements to respond positively to TF effects, thus forestalling the disease by development of beneficial immune responses. The improvement of these values in combination with the pronounced positive dynamics of the immune system leads us to conclude that even in cases of severe infection, as in osteomyelitis, TF can be recommended as an addition to the conventional treatment. It is also useful to prolong the period of product administration to further improve the indices of the protective mechanisms and, most of all, to improve the patients’ immunity.