

Systematic anthropological approach in the treatment of acute and recurrent stages in patients with psoriasis

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Abstract

The article describes a new technology is the treatment of acute and relapsing phases in patients with psoriasis based on the use of multilevel system antropological approach consisting of psychosomatic correction of the patient by methods magnetolaser and neuroacoustic stimulation of the central nervous system on the basis of personalized program in combination with compensation aerobic starvation by applying endonasal respiration singlet-oxygen mixture in a magnetic field and a decrease in cutaneous manifestations of pathological changed d on the basis of no injection transdermal administration autoplasm blood by pulsed electrophoresis in a magnetic field.

Key words: psoriasis, psychosomatic correction, magnetolaser stimulation, neuroacoustic stimulation, transdermal administration autoplasm, electrophoresis in a magnetic field, endonasal breathing singlet-oxygen mixture.

Relevance. Psoriasis or scaly lichen - is a chronic polyetiological disease, mainly affects the skin and subcutaneous tissue. Suffer from psoriasis 1.5 to 3% of all people in the world. Progression of the disease state develops mainly in patients with initially dry, thin, sensitive skin and is much more common in women than in men. The occurrence of the primary symptoms of psoriasis in the majority of cases occur in the period of 15-25 years. In most cases, initially it appears on the scalp, neck and elbows.

Psoriasis is a chronic disease characterized by an undulating current, with periods of remissions and exacerbations caused by a variety of reasons: genetic predisposition, lifestyle and psychosomatic disorders or disease transferred viral disease, autoimmune processes, etc.

Depending on the severity and localization of psoriatic lesions, patients with this pathology, may experience significant physical or psychological discomfort, difficulty in social adaptation and professional activities. As a rule, in patients with psoriasis can be diagnosed anxiety and depressive disorders of varying severity, which may lead to the development in conjunction with the pain, itching and severe immunopathological disorders [social phobia](#), which entails considerable social isolation of the patient and reduced quality of life. As a rule, the majority of patients with psoriasis there is intoxication and the appearance of oxygen starvation.

Given the etiology and pathogenesis of psoriasis has been sponsored developed and clinically tested technology treatment of acute and relapsing phases of psoriasis based on the use of multilevel system anthropological approach, which consists of the combined application of the following techniques:

- psychosomatic condition of the patient and correction methods magnetolaser neuroacoustic stimulation of the central nervous system on the basis of personalized program binaural beats frequency modulation of the optical flow;
- compensation aerobic metabolism disorders by applying endonasal breathing singlet-oxygen mixture in a magnetic field and a decrease in cutaneous manifestations of

pathological changes on the basis of no injection transdermal autoplasmal blood by pulsed electrophoresis in a magnetic field.

Materials and methods of research.

Psychosomatic patient correction methods magnetolaser neuroacoustic and stimulation of the central nervous system on the basis of personalized program isochronous rhythms. Frequency modulation of the optical flow executed by applying hardware and software "TARE". Magneto optical flow stimulation was red and blue range of the spectrum of the total capacity of 220 ± 22 mW and the magnetic field strength of 10 ± 4 mT. The modulation frequency was determined by the method Samosyuk - Chukhraev [1] on the basis of subjective comfort perception flashing frequency optical flow in the range of alpha rhythm (8-13 Hz). Neuroacoustic stimulation was conducted at a frequency of isochronous psoriasis (727 Hz, 787 Hz, 880 Hz, 2160 Hz 2489 Hz или 2720 Hz [2-5]), selected on the basis of the subjective perception of sound frequency comfort against the backdrop of relaxing music.

Compensation for violation of an aerobic metabolism disturbances conducted on the basis of performance endonasal breathing singlet-oxygen mixture in a magnetic field using the MIT-S apparatus [1, 9-12].

Reduction of cutaneous manifestations of pathological changes of the skin was performed on the basis of no injection transdermal autoplasmal blood by pulsed electrophoresis in a magnetic field.

The basis for use autoplasmal rich in platelets is that platelets contain protein factors (PRP-factors), a regenerative cell initializing process. Autoplasmal, it is the most natural and accessible, including biochemical component ratio pictures, which is peculiar to the particular patient.

Autoplasmal application strategy is to stimulate regeneration processes, due to the presence of platelet growth factors, which control the natural tissue regeneration mechanisms.

The major growth factors contained platelets are:

- IGF (insulin-like growth factor)
- PDGF (platelet derived growth factor)
- EGF (epidermal growth factor)
- FGF (fibroblast growth factor)
- TGF- β («family" transforming growth factor)
- PDEGF (platelet-derived endothelial cell growth factor),
- VEGF or PDAF (growth vascular endothelial factor)
- PLGF-1/2 (placental growth factors).

The purpose of research was the development of technology psychosomatic condition of the patient and correcting subdermal active stimulation of regenerative processes in the zone of pathology based electrophoresis technology blood autoplasm (EPBAP) developed by the researchers of the National Institute of Surgery and Transplantation. AA Shalimov NAMS Ukraine together with NMC "Medinteh" [7].

Applied authors EPBAP technology includes autoplasm blood technology of preparation and a method for transdermal administration. Practical implementation EPBAP technology was highly effective in the treatment programs of the skin and subcutaneous tissue in the foci of psoriatic lesions. The new method and technology of its realization are patented in Ukraine and have no analogues in the world [6-8].

Autoplasm blood preparation technology includes sampling blood in an amount of 20-40 ml (depending on the size of the affected skin) and subsequent centrifugation in a magnetic field. Thus according to our observations, the quality of cooked autoplasm depends centrifuge operating parameters: frequency of rotation of the rotor radius, the magnetic field parameters of centrifugation time and the number of viable platelets remaining after treatment of whole blood. To perform EPBAP firm "Medinteh" it was designed and built a special device with original electrodes.

During cooking autoplasm blood on the proposed technology authors in its composition protein complexes are retained maximally, amino acids, proteins and enzymes.

EPBAP authors proposed technology is based on penetration of cells (platelets, leukocytes, and protein complexes, amino acids, etc.) under the action of pulsed current through the specially shaped ducts of natural leather, followed by disintegration and free to yield biologically active substances into the dermis and subcutaneous fat fiber. Additionally, during the procedure, there is electroneurostimulation "problem" areas of the skin, which is largely restores nerve and stimulate the achievement of visible therapeutic (cosmetic and functional) effect.

To determine the effectiveness of the proposed technology study was conducted on 24 volunteers who were divided randomly into 2 groups. The criterion for inclusion in the study group was the presence of the patient contraindications for physiotherapy treatment, as well as their informed consent to participate in the study. The group consisted of individuals aged 39-67 years, including 22 women and 2 men. The patients are assigned randomly into two groups of 12 patients (11 women and 1 man).

All patients underwent a psychosomatic condition correction methods magnetolaser and neuroacoustic stimulation. Further, in the group I procedure performed "Placebo" method using isotonic saline (per procedure - 100 ml). Immediately before the procedure solution was applied

to a napkin, which was applied to the problem area. The procedure performed by the procedure of labile napkins. The pulse repetition frequency corresponds to the resonance frequency vibrations of erythrocytes. The current strength is set at a physiological sensation current lung and corresponded to 0.7 ± 0.2 mA. The duration of one treatment was 15 minutes per course of treatment was assigned 4 treatments with a frequency of 1 times a week.

In group II treatment was carried out analogously to the first group, with the replacement of saline at autoplasm blood prepared according to the developed technique. The current strength is set at a physiological sensation current lung and corresponded to 0.6 ± 0.2 mA.

In both groups, the treatment was carried out on an outpatient basis.

According to the results of preliminary studies can be preliminary conclusions:

1. All patients participated in the study, there was reduction of anxiety and depressive disorders.
2. In group I, almost all patients who participated in the study, there was a slight change in the direction of improving the color and structure of the inflamed tissue.
3. In group II all patients participating in the study, there was a significant improvement in color and texture of the skin of the affected area after the first procedure (Fig. 1A, Fig. 2B). Following the procedure 2 in almost all patients of the second group there were significant improvement of skin rashes psoriatic zone (Fig. 3). In 9 patients of the second group after 6 treatments practically disappeared zone psoriatic skin lesions in 3 patients and group 2 were observed decrease in the area of inflamed skin of not less than 80%.



AB

Fig. 1. Patient K. 46 years. Psoriatic lesions tibia (left lower leg, the rear surface).

A - before treatment. B.- 7 days after the first treatment.



AB

Fig. 2. The same patient. Psoriatic lesions tibia (right lower leg, the rear surface).
A - before treatment. B.- 7 days after first treatment



AB

Fig. 3. The same patient (right lower leg, the rear surface).
A - before treatment. B.- 21 days after two treatments.

EPBAP technique is absolutely painless for patients with psoriasis. During the procedure, patients subjectively feel a slight tingling sensation. The majority of patients who participated in the study after the procedure, there is a slight feeling of drowsiness and a pleasant stay.

The method developed by the authors is completely devoid of complications inherent to standard procedures injecting blood plasma. The combined action of the various physical factors in the procedure developed by authors electropasmophoresis significantly increases the effect of external influences compared with intradermal administration autoplasm, leaves no visible adverse effects on the skin after the treatment session is completed. The effectiveness of platelet

through all layers of the skin is studied in detail and confirmed by the authors conducted research results.

Conclusions:

1. Applying correction psychosomatic condition of the patient and methods magnetolaser neuroacoustic stimulation of the central nervous system helped to reduce the level of depression (for psychometric table A. Beck) on average 17 ± 8 balls and alarms (psychometric table Spilbergerer) an average of 11 ± 4 ball.

2. Developed technology of preparing blood EPBAP autoplasm by centrifugation once with the parameters R and G in a magnetic field leads to a substantial increase of efficiency of isolation of autologous cells of the recipient blood substance.

3. Clinically proven efficacy of EPBAP technology in the treatment of acute and relapsing forms of psoriasis in exacerbation of the pathological process phase.

4. The therapeutic effects of the method used depends on the number of procedures performed (2-x) in the acute phase (up to 6) in order to achieve long-term remission.

5. EPBAP technology in the treatment of acute and recurrent psoriasis stages is absolutely painless, in the course of the study are not fixed complications of the use of the technology proposed by the authors.

Declarations

Ethics approval and consent to participate

The research related to human use complied with all the relevant national regulations, institutional policies, and was in accordance with the tenets of the Helsinki Declaration. The study protocol was approved by the Ethical Committee of National Institute of Surgery and Transplantation named A.A. Shalimov NAMS of Ukraine, Kyiv, Ukraine.

During realization of tests, all participants provided informed consent and used all measures for maintaining anonymity of participants.

Availability of data and material

Authors are encouraged to / should make readily reproducible materials described in the manuscript, including new software, databases and all relevant raw data, freely available to any scientist

wishing to use them, without breaching participant confidentiality. In any case, authors should make their new software, databases, application / tool described in the manuscript available for testing by reviewers in a way that preserves the reviewers' anonymity.

Consent to publish

Not applicable

Competing interests

The authors declare that they have no competing interests.

Conflicts of interest

All authors have no conflicts of interest to declare.

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Authors' contributions

GT, NC participated in the design of this study. GT, NC performed the statistical analyses. GT, NC, WZ drafted the manuscript. GT, NC, WZ were involved in data collection and / or made important intellectual contributions to the interpretation of data and the writing on paper. All authors critically revised and approved the final version.

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