THE EFFECTIVENESS OF PLACENTA HYDROLYZATE IN THE TREATMENT OF LICHEN PLANUS

A.Sh.Inoyatov,M.M.Jabbarov

Republican Specialized Scientific and Practical Medical Center for Dermatovenereology and Cosmetology of the Ministry of Health of the Republic of Uzbekistan

ABSTRACT

The aim of the study: clinical evaluation of the use of the drug Laennec in patients with lichen planus.

Materials and research methods. Under supervision there were 42 patients with lichen planus (men-27, women-15) aged 18 to 45 years and disease duration from 5 months to 16 years. In most patients, the onset of the disease is associated with neuropsychological trauma. Based on the clinical manifestations (papular rashes with a shiny surface and the presence of punctate impressions, polygonal shape and accompanied by intense itching of the skin), favorite localization and the presence of a Wickham mesh symptom, patients were diagnosed with lichen planus (cases of atypical forms of lichen planus were excluded).

Research results. The treatment in two groups of patients with LP (control and comparative) made it possible to obtain a therapeutic effect in group I in 17 out of 22 patients (77.3%) and in group II in 10 out of 20 (50%) patients. In patients of group I, by the end of treatment, subjective sensations in the form of itching of the skin practically disappeared and rashes on the oral mucosa, previously represented by papular elements, completely regressed. Tolerability of the drug was satisfactory, in no case were any side effects and allergic conditions recorded. The anti-inflammatory and immunomodulating effect of Laennec was recorded in patients with LP of group I, who showed a significant increase in the content of IL-4 (from 2.2±0.2 pg/ml to 6.1±0.5 pg/ml at $p<0.05$), along with a significant decrease in the content of IL-17 (from 12.5±1.4 pg/ml to 4.4±0.9 pg/ml at $p<0.001$) and TNF-α (from 19.1± 2.2 pg/ml to 5.5±0.8 pg/ml at $p<0.001$) in the blood serum of LP patients. The study of the cytokine status in patients of group II revealed minor changes in the profiles of the studied cytokines: IL-4 (from 2.5±0.2 pg/ml to 3.3±0.6 pg/ml at $p>0.05$); IL-17 (from 11.9±3.3 pg/ml to 10.2±1.9 pg/ml at $p>0.05$) and TNF-α (from 18.5±3.6 pg/ml to 15.4±2.4 pg/ml at $p<0.05$).

Conclusion. Clinical observations of patients and clinical and laboratory diagnostics confirmed the high efficacy of Laennec drug, its good tolerability, and the absence of side effects in the treatment of lichen planus. The positive changes achieved during the treatment allow us to consider Laennec a drug that significantly improves the quality of life.

KEYWORDS: lichen planus, diagnosis, treatment, placenta extract.

INTRODUCTION

Lichen planus (LP) is a chronic inflammatory immune-dependent disease of the skin, mucous membranes and nails with specific clinical manifestations, which is based on general biological patterns inherent in all inflammatory processes. The frequency of LP among other dermatoses varies from 0.5 to 3% [1,3,6,8]. Its atypical forms are much less common, but the variety of their

clinical manifestations present certain difficulties and interest for specialists in terms of diagnosis and treatment.

Treatment of common forms of LP is still a challenge for dermatologists. To date, none of the available theories of the occurrence of the disease can not fully explain its origin, and therefore there are many different means and methods of therapy. Psychotropic, antihistamine, hyposensitizing agents are used, as well as quinoline preparations, aromatic retinoids, antibacterial, immunosuppressive agents, cytostatics, vitamins, various physiotherapeutic methods and local treatment [6,11,12,14,15].

In modern clinical medicine, placental preparations (PP) have been actively used since the 1920s. It was during this period that the domestic professor Filatov V.P. justified the method of tissue therapy, using frozen components of the human placenta to treat wounds, burns, etc. It was found that when freezing in the tissues of the placenta, the concentration of biologically active substances (amino acids, peptides, etc.) sharply increases, which can be isolated from the tissue and used in medical practice. This tissue therapy enhances the protective forces, activates the processes of self-regulation of the body and allows you to successfully resist diseases. The accumulated experience of researchers from different countries has shown a wide range of possible clinical applications of PP, including in the treatment of dermatoses [9]. To date, a systematic analysis of 4120 publications on the clinical and experimental pharmacology of PP has made it possible, on the basis of a representative set of studies and data from evidence-based medicine, to substantiate the prospects, effectiveness and safety of their use in various branches of medicine [4].

The representative of the PP is Laennec, which is a high-quality purified human placenta hydrolyzate, which allows it to be introduced into the patient's body in various ways: intravenously, intramuscularly, by pharmacopuncture, by applications. The low molecular weight of the active components of the drug provides optimal pharmacokinetics when it is administered intramuscularly, injections are well tolerated, almost painless. It can be used simultaneously with other drugs and dietary supplements. The unique advantage of PP is the fact that, depending on the state of the immune system, it can have both a stimulating and a depressing effect on immune function [2]. This quality sets it apart from most immunostimulants currently available on the market. In the presence of immunodeficiency, the use of PP will help to increase the processes of immune defense, which can be used in the treatment of chronically relapsing diseases. At the same time, under conditions of excessive activation of the immune system, PPs can reduce the function of T-cell hypersensitivity and excessive antibody production. These properties of PP create prerequisites for their use in the treatment of various allergic and autoimmune diseases [5,7,10,13].

After registration of the drug and permission for use on the territory of Uzbekistan, research work on the use of the drug Laennec in various areas of medical practice began to actively expand. Undoubtedly, the integration of the Laennec drug has opened up new opportunities for optimizing the methods of complex treatment of such chronic, recurrent, autoimmune dermatoses, such as atopic dermatitis, psoriasis, lichen planus, genital herpes, etc. In this regard, there is no doubt that the search for new of immunomodulatory drugs is relevant, and with the advent of the placental drug Laennec, it is promising for direct introduction into medical practice by a dermatologist and cosmetologist. It should be noted that there are data [14] on the use of PP in the treatment of erosive-ulcerative form of lichen planus, which made it possible to

accelerate the processes of epithelialization and regeneration, reduce the intensity of chronic inflammation, thereby improving the quality of life of patients.

The aim of the study was the clinical evaluation of the use of Laennec in patients with lichen planus.

MATERIALS AND METHODS

Under supervision there were 42 patients with lichen planus (men-27, women-15) aged 18 to 45 years and disease duration from 5 months to 16 years. In most patients, the onset of the disease is associated with neuropsychological trauma. Based on the clinical manifestations (papular rashes with a shiny surface and the presence of punctate impressions, polygonal shape and accompanied by intense itching of the skin), favorite localization and the presence of a Wickham mesh symptom, patients were diagnosed with lichen planus (cases of atypical forms of lichen planus were excluded). Among the observed 42 patients, rashes on the oral mucosa were detected in 9 (21.4%). Damage to the nail plates (onychogryphosis, longitudinal striation, pterygium of the nail, etc.) was detected in 7 out of 42 (16.7%) patients with LP. To assess the clinical efficacy of Laennec, the patients were divided into groups II, comparable in age, duration of the disease and the intensity of rashes: Group I (control) was represented by 22 patients with LP, who received standard treatment in combination with Laennec; Group II (comparative) 20 patients with LP received only standard treatment, including antihistamines, desensitizing agents and external treatment. The drug Laennec was administered 2 ml intramuscularly every other day. During the course of treatment, patients received 10 injections of the drug. Outwardly, indifferent agents (dexsapanthenol) were used. The content of pro- (IL-4) and anti-inflammatory (IL-17, TNF-α) cytokines in the serum of LP patients before and after the treatment was evaluated by ELISA method.

RESULTS AND DISCUSSION

The treatment in two groups of patients with LP (control and comparative) made it possible to obtain a therapeutic effect in group I in 17 out of 22 patients (77.3%) and in group II in 10 out of 20 (50%) patients. In patients of group I, by the end of treatment, subjective sensations in the form of itching of the skin practically disappeared and rashes on the oral mucosa, previously represented by papular elements, completely regressed. Tolerability of the drug was satisfactory, in no case were any side effects and allergic conditions recorded. The anti-inflammatory and immunomodulating effect of Laennec was recorded in patients with LP of group I, who showed a significant increase in the content of IL-4 (from 2.2±0.2 pg/ml to 6.1±0.5 pg/ml at $p<0.05$), along with a significant decrease in the content of IL-17 (from 12.5±1.4 pg/ml to 4.4±0.9 pg/ml at $p<0.001$) and TNF-α (from 19.1± 2.2 pg/ml to 5.5±0.8 pg/ml at $p<0.001$) in the blood serum of LP patients. The study of the cytokine status in patients of group II revealed minor changes in the profiles of the studied cytokines: IL-4 (from 2.5±0.2 pg/ml to 3.3±0.6 pg/ml at $p>0.05$); IL-17 (from 11.9±3.3 pg/ml to 10.2±1.9 pg/ml at $p>0.05$) and TNF-α (from 18.5±3.6 pg/ml to 15.4±2.4 pg/ml at $p<0.05$). Therefore, the drug Laennec is able to actively influence the state of the cytokine status, which is manifested by the clinical effect in this group of patients. Standard treatment

allows only half of the patients to obtain a clinical effect, since a high level of inflammatory mediators, in particular cytokines, remains high.

An important point in the study is the fact that the use of the drug Laennec allows you to minimize the number of drugs used, which in some cases may themselves be provoking moments in the development of the isomorphic Koebner reaction and, therefore, cause an exacerbation of the skin pathological process.

CONCLUSION

Clinical observations of patients and clinical and laboratory diagnostics confirmed the high efficacy of Laennec, its good tolerability, and the absence of side effects in the treatment of lichen planus. The positive changes achieved during the treatment allow us to consider Laennec a drug that significantly improves the quality of life. Finally, the presented data indicate the continuation of an active search for the introduction of a polymodal drug - the placental drug Laennec - into practical medicine, which will undoubtedly find its place in the professional accumulation of clinical experience, which will be used by practitioners to optimize and improve the complex therapy of chronic, often recurrent dermatoses.

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