

KARTALIN – AGENT OF YOUR CHOICE IN THE TOPICAL TREATMENT OF CHRONIC DERMATOSIS

V.S. Dmitruk

Siberian State Medical University of Tomsk

Abstract

Correct choice of topical treatment in treating chronic dermatosis is a fundamental issue facing dermatologists, and in most cases is the most important factor for achieving long-term remission. A study on the clinical effectiveness of Kartalin ointment was conducted at the skin disease clinic of the Siberian State Medical University. As a result of a comprehensive treatment including the use of Kartalin, good therapeutic effect, as evidenced by improved PASI and SCORAD scores, was observed in 100 psoriasis sufferers and 46 persons diagnosed with atopic dermatitis.

Keywords

kartalin, psoriasis, atopic dermatitis.

INTRODUCTION

Psoriasis and atopic dermatitis are types of dermatosis that have attracted the interest of a great deal of scientific researchers. Nevertheless, its pathogenesis is not fully understood [2, 3, 8, 10]. Given the high percentage of the population suffering from this skin condition, systemically effective topical pharmaceuticals are actively sought and employed, especially those restoring keratinocyte proliferation and differentiation processes, thus normalizing the structure and functional capability of the epidermis [1, 4, 5].

The first step in the topical treatment of such diseases is the use of anti-inflammatory and immunosuppressant products, primarily topical corticosteroids [6, 9].

As a result of the hyperkeratosis and parakeratosis occurring in psoriasis and atopic dermatitis, epidermis barrier function is impaired by decreased skin moisture and degraded stratum corneum integrity due to a decrease in quantity of fortifying lipidic substances (cholesterol, fatty acids, triglycerides) [11, 12]. In light of the above, psoriasis and atopic dermatitis therapies make extensive use of substances that moisturize and “oil” the skin.

Lipids (fatty acids, triglycerides, phospholipids, cholesterol) serve as the primary means of regulating transepidermic water loss. Dermatology currently makes widespread use of cosmetics that include the above substances. For patients with chronic dermatological conditions, it can take anywhere from a week to



Vadim S. Dmitruk

Associate Professor, Department of Dermatology & Venereology

several months for pathologically changed skin to heal, and thus the cumulative cost of procuring the aforementioned substances over a course of treatment may range from dozens to hundreds of dollars.

There is a good Russian-made alternative to the above barrier-function restoring substances: Kartalin ointment (Certificate of Conformity No. 7147870). This substance falls in the “solid-oil” category of ointment (like Rybakov ointment, etc.), which has been used for at least a decade to treat chronic skin conditions [7].

In consideration of the above, our study aim was to evaluate the clinical effectiveness of Kartalin for patients with atopic dermatitis and psoriasis.

METHODS AND MATERIALS

In order to achieve the study aim, 100 patients diagnosed with psoriasis were examined and treated at the Siberian State Medical University Skin Disease Clinic. Initial PASI index scores were calculated for all patients under our observation on the basis of their clinicopathologic states. Patients with mild to moderate psoriasis (up to 50 points on the PASI index) were selected in the study group. PASI index scores were recalculated after 4 weeks and treatment effectiveness was evaluated based on this data.

The first study group – Group A (n=50) – received standard inpatient treatment consisting of: Disintoxicating solutions, hyposensitizing agents, and vitamins coupled with daily application of Kartalin ointment on psoriatic papules over the course of 4 weeks.

The second group – Group B (n=50) – received 4 weeks of comprehensive inpatient treatment comprising disintoxicating and hyposensitizing agents, vitamins, indifferent ointments, and therapeutic skin care products.

The initial PASI score for group A was 32.6 points. The initial psoriasis severity indicator (PASI) for group B was 31.4 points (figure 1).

PASI scores for the study groups were calculated again at the end of treatment (after 4 weeks) in order to provide a window into the psoriasis symptom regression trend. Group A now scored at 13.1, and Group B at 18.6.

It is apparent from figure 1 that negation of clinical psoriasis symptoms will occur in both study groups over the course of treatment. After 4 weeks, a PASI score reduction was observed in every patient treated. Meanwhile, it fell by 59.8% in Group A and 40.8% in Group B. The PASI score improvement trend in both groups makes it possible to state that a clinical improvement will occur in Group A after administered therapy (a PASI score improvement of more than 50%).

The second part of the study consisted of observing and treating 46 patients with atopic dermatitis. Criteria for inclusion in the group were: Clinically confirmed diagnosis, patient informed consent, having reached adolescence or adulthood, and clinical lichenoid dermatitis or squamous dermatitis with lichenification. Criteria for exclusion from the study groups were: Diffuse atopic dermatitis, a severe case, infant or childhood age, individual intolerance for ointment ingredients, or pyogenic complications.

The patients were divided into two groups. The first group – Group C (n=26) – comprised patients who had received topical treatment in the form of Kartalin ointment over the course of 2 months. The second group – Group D (n=20) – comprised patients receiving topical treatment consisting of both indifferent and moisturizing ointments, as well as cosmeceuticals. The SCORAD index was used to determine atopic dermatitis severity. At the beginning of the course of treatment, SCORAD scores were: 59 points for the first group — Group C — and 60 points for Group D, the second group. After the course of treatment, that indicator improved to 14 points for Group C, and 18 points for Group D (figure 2).

All of the study groups were representative in terms of age, sex, and length of time having suffered from psoriasis. Data was statistically analyzed using the Biostastica 4.03 software package (1998). Mathematical analysis of the data was undertaken using Student's criteria. Differences were considered statistically significant at $p < 0.05$.

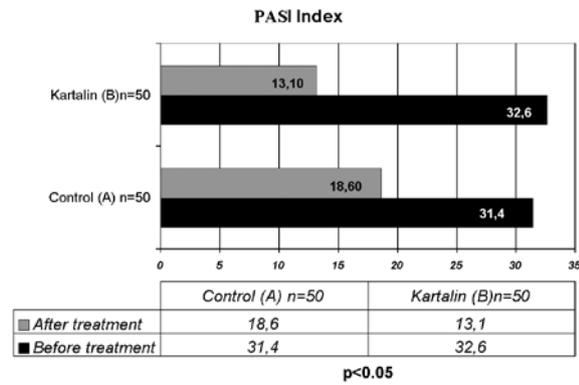


Figure 1.

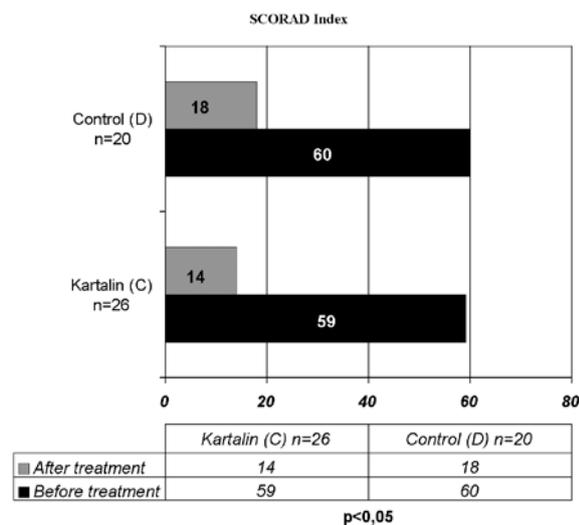


Figure 2.

CONCLUSIONS

In view of the above, the following conclusions may be drawn:

1. Kartalin is effective in the topical treatment of atopic dermatitis (lowering SCORAD scores by 76%) and may be used in single-agent treatment of mild and moderate atopic dermatitis with squamous symptoms and lichenification in inpatient and outpatient settings.
2. Kartalin ointment is an effective product in the topical treatment of psoriasis (reducing PASI scores by 59.8%) and may be effectively used in the comprehensive treatment of mild and moderate psoriasis.

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