

세포교정영양요법(OCNT)을 이용한 한포진 개선 사례 보고

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전라남도 순천시 봉화3길 14 명성온누리약국

A Case Report on the Improvement of Dyshidrotic Eczema Using Ortho-Cellular Nutrition Therapy (OCNT)

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ABSTRACT

Objective: Dyshidrotic eczema is a skin disorder characterized by small vesicles, pruritus, and erythema on the hands or feet. Although its exact cause has not been fully determined, factors such as contact allergy and underlying skin conditions are considered contributing elements. Treatment options include basic skin moisturization, administration of antihistamines, topical corticosteroids, and phototherapy. Because treatment efficacy and side effects vary among patients, it is essential to select the most appropriate therapy tailored to each individual.

Case Report: The patient in this case study was a woman in her thirties with a 10-year history of dyshidrotic eczema. She presented with erythema and vesicles on her hands, accompanied by severe pruritus. Despite ongoing hospital visits and pharmacological treatment, her symptoms progressively worsened. Consequently, Ortho-Cellular Nutrition Therapy (OCNT) was applied, incorporating fennel, clove, anthocyanins, omega-3, glycyrrhizin, curcumin, MSM, hyaluronic acid, and selenium. Following this regimen, the patient's dyshidrotic eczema symptoms improved markedly, and she has since maintained a stable condition without major recurrence.

Conclusion: Although this case study involved only a single patient and therefore has limitations in generalizing OCNT to all dyshidrotic eczema cases, an individualized OCNT regimen, tailored to the patient's symptoms and overall health status, may offer benefits in the management of dyshidrotic eczema.

Keywords Ortho-Cellular Nutrition Therapy (OCNT), dyshidrotic eczema, vesicles, inflammatory response, skin moisturization

Introduction

Dyshidrotic eczema is a chronic, recurrent form of dermatitis characterized by the formation of multiple small vesicles, 1–2 mm in size, on the hands or feet, accompanied by severe pruritus. These vesicles typically develop deep within the skin and present as firm lesions. The prevalence of hand dermatitis in the general population is estimated at 2–8.9%, with approximately 5–20% of these cases diagnosed as

dyshidrotic eczema, making it one of the more common forms of hand dermatitis. Regarding age and sex distribution, no significant gender differences have been observed, but the condition most commonly occurs in individuals between 20 and 30 years of age.¹

Although the exact causes and aggravating factors of dyshidrotic eczema have not been fully determined, several etiologies have been suggested. The most prominent among these is contact allergy induced by specific substances such as hygiene products, cosmetics, or metals. Additionally, underlying skin conditions, including tinea, atopic dermatitis, and hyperhidrosis, as well as smoking, have been reported to influence disease onset and symptom exacerbation.²

Because the primary symptom of dyshidrotic eczema is the development of vesicles on the hands, both the extent of the affected area and the density of vesicles serve as key diagnostic indicators. Moreover, erythema at the lesion site, the degree of keratinization, and the severity of pruritus reported by the

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Received Aug 27, 2025; Revised Aug 28, 2025; Accepted Aug 29, 2025; Published Aug 29, 2025

doi: <http://dx.doi.org/10.5667/CellMed.spc.139>

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† This report has been translated and edited by the CellMed editor-in-chief, Prof. Beom-Jin Lee.

patient are comprehensively assessed to determine disease severity. Based on these evaluations, treatment strategies should be tailored appropriately for each patient.³

In the treatment of dyshidrotic eczema, fundamental measures such as moisturizing the affected area and avoiding irritants are essential. This involves frequent and adequate application of emollients, as well as minimizing contact with cleansing agents, allergens, and other triggering factors. Additionally, antihistamines may be prescribed to alleviate pruritus, and topical corticosteroids can be used to reduce symptoms. Other therapeutic options include immunosuppressive agents or treatments involving light or radiation. Although a variety of treatment approaches exist, their efficacy and potential side effects may vary among patients, making it crucial to identify and apply the therapy most appropriate for each individual.⁴

The patient in this case study presented with dyshidrotic eczema on her hands and had managed her symptoms through dermatological evaluation, pharmacological treatment, and traditional medicine consultations. However, symptoms consistently recurred whenever treatment was discontinued. Therefore, Ortho-Cellular Nutrition Therapy (OCNT) was administered, and the course of treatment is detailed in this report.

Case Study

1. Subject

This study involved a single patient with dyshidrotic eczema.

- 1) Name: Kim OO (33 years old, F)
- 2) Diagnosis: dyshidrotic eczema
- 3) Date of onset: 2013
- 4) Treatment period: February 2025 – August 2025
- 5) Chief complaints: severe pruritus, vesicles on the wrists and

hands

- 6) Medical history: constipation, indigestion
- 7) Social history: part-time experience as a kitchen assistant
- 8) Family history: None
- 9) Current illness and medications: Jesolon Tab. 4mg (methylprednisolone), Bepotaon Tab. (bepotastine), Mxxy Tab. (levocetirizine), topical corticosteroid ointments – used as prescribed by dermatologists during severe symptom episodes

2. Methods

The OCNT prescribed to the patient is detailed in Table 1.

Results

Before the implementation of OCNT, the patient exhibited severe erythema and lesions across the hands and wrists, with considerable exudate. She also reported a dull complexion, constipation, and indigestion. OCNT was prescribed accordingly, and after approximately 10 days, improvements in erythema and lesions were observed, along with a reduction in the amount of exudate (Fig. 1). About one month after starting OCNT, most dyshidrotic eczema-related symptoms had subsided. Although occasional signs of symptom recurrence were noted, they were manageable with continued OCNT. Three months into the therapy, the patient continued consistent management and was able to carry out daily activities without relapse.

Discussion

The patient was a Korean woman in her thirties who, upon visiting the pharmacy, exhibited severe erythema and exudate on her hands, including the fingers and wrists, with visible vesicles. According to her history, hand eczema first appeared

Table 1. OCNT prescribed to the patient

	Purpose	Oral medications	Topical medications [†]	Other prescriptions
1st OCNT (Feb 2025)	Overall improvement of dyshidrotic eczema and associated discomfort	<ul style="list-style-type: none"> • Paragon 101 • Apple Vinegar Powder 101 • Cyaplex A Granules 101 • Curculpex Capsule 101 • EZplex Capsule 101 • Licoplex F Granules 101 • Eufaplex Alpha Capsule 303 • Heartberry Black 100[§] • Aqua SAC Pure 100[§] • Cyaplex Mineral Rock Salt 100[§] 	<ul style="list-style-type: none"> • Cyaplex Balm • Licoplex Liquid • Sulfoflex Cream Mild 	Recommended consumption of a detox juice made by blending boiled vegetables
2nd OCNT (Mar 2025)	Relief of temporarily worsened symptoms following improvement of dyshidrotic eczema	<ul style="list-style-type: none"> • Paragon 101 • Apple Vinegar Powder 101 	<ul style="list-style-type: none"> • Cyaplex Hydro Cream 	Combined intake of detox juice and dietary management
3rd OCNT (May 2025)	Maintenance of the improved condition and prevention of recurrence after OCNT	<ul style="list-style-type: none"> • Hemoplex Capsule 200 • Thyroplex F Capsule 100 • Curculpex Capsule 100 • Vivacell C Capsule 100 	–	Concurrent dietary management

* 100: Once daily, one capsule/packet per dose, taken in the morning; 200: Once daily, two capsules/packets per dose, taken in the morning; 101: Twice daily, one capsule/packet per dose, taken in the morning and evening; 303: Twice daily, three capsules/packets per dose, taken in the morning

† The patient was advised to apply the topical medications to the affected area as needed.

§ The patient was advised to take the above prescriptions mixed in 350 ml of water.

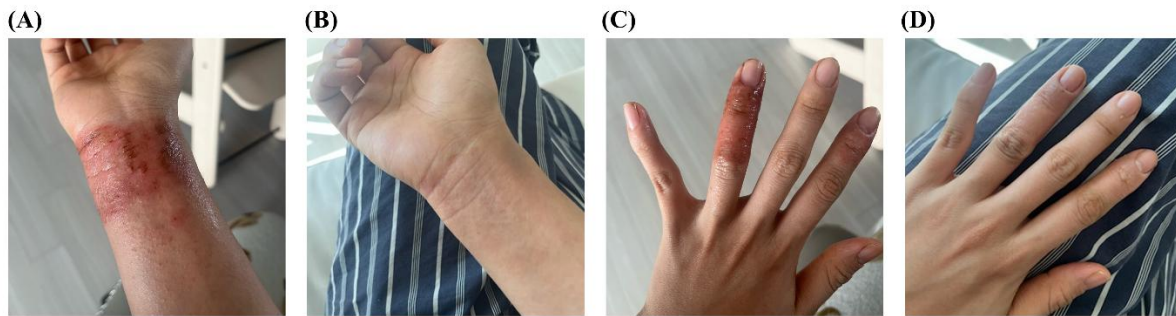


Fig. 1. Photographs of the patient's dyshidrotic eczema lesions before and after OCNT (A, B) Right wrist: February 10, 2025 (before), February 18, 2025 (after); (C, D) Left fingers: February 10, 2025 (before), February 18, 2025 (after)

in 2013 after frequent dishwashing while working part-time. She subsequently visited a dermatology clinic, where she was diagnosed with dyshidrotic eczema and prescribed oral medications and topical ointments, which initially improved her symptoms. However, her condition worsened whenever the medications were discontinued, creating a recurrent cycle. Over time, the overall severity of her symptoms increased. She also sought treatment at a traditional medicine clinic, but episodes of improvement and worsening continued. Notably, her symptoms significantly worsened after childbirth, yet she continued to rely solely on dermatological and traditional medicine treatments and applied individually purchased natural oils advertised as beneficial for eczema.

After reviewing the patient's history and examining the affected areas, OCNT was applied to improve her symptoms and discomfort. The treatment plan was established with the aim to:

- 1) Improve skin homeostasis by modulating the intestinal microbiota;
- 2) Alleviate symptoms through regulation of inflammatory responses and enhance the skin barrier by restoring moisture;
- 3) Improve immune function to relieve symptoms and support skin homeostasis; and
- 4) Prevent recurrence and maintain overall health following symptom improvement.

Gut microbiota have been reported to influence skin health through mechanisms such as the production of metabolic byproducts like short-chain fatty acids (SCFAs), modulation of neuroendocrine pathways including GABA and acetylcholine, and regulation of intestinal immunity to control the influx of toxins into the skin.⁵ Accordingly, the primary goal of OCNT was to improve intestinal microbial balance, achieved through the incorporation of ingredients such as fennel, clove, mother of vinegar, and postbiotics.

Fennel is known to help create an environment conducive to the growth of beneficial gut bacteria by protecting the intestinal mucosa and barrier and regulating inflammatory responses through modulation of cytokines such as IL-1 β and TNF- α . Clove has been shown in animal studies to increase the proportion of beneficial gut bacteria, thereby aiding in the restoration of intestinal microbial balance.^{6, 7} Mother of vinegar, a sediment-like component produced during the fermentation of vinegar, is reported to support improvements in the intestinal barrier and immune function. Postbiotics refer to non-viable microorganisms or their components and have been shown to play beneficial roles, including modulation of gut microbiota, strengthening of the intestinal barrier, and

regulation of immune function.⁸ These ingredients were provided through the administration of Paragon and Apple Vinegar Powder.

Next, OCNT, administered as both oral and topical formulations, was applied to alleviate symptoms such as erythema and exudate by regulating inflammatory responses and enhancing the skin barrier through moisture restoration. As this approach plays a central role in addressing the patient's chief complaints, a variety of nutrients were prescribed according to her condition. The specific nutrients administered are detailed in Table 2.

When the body's immune system is imbalanced, damage to the epidermis can allow irritants or antigens to penetrate, potentially triggering an excessive immune response. This may create an environment conducive to the development of eczema, including dyshidrotic eczema.¹⁹ Therefore, selenium and manganese, which are known to support immune function, were co-prescribed to the patient.

Selenium is essential for the synthesis of selenoproteins, which are critical for the function of activated T cells, and supplementation has been reported to enhance T cell responses. Selenium deficiency has been associated not only with impaired immune function but also with cognitive dysfunction and reduced reproductive capacity.²⁰ Manganese is a trace element that serves as a cofactor for numerous enzymes in the body and has been shown to enhance the activity of immune cells such as macrophages, natural killer (NK) cells, and neutrophils.²¹ These nutrients are included in EZplex, which was used to provide the patient with an appropriate amount of selenium and manganese.

Following the above OCNT, the patient reported a marked reduction in erythema, exudate, and vesicles on the affected areas and stated that her daily activities were no longer impeded. Further consultation revealed that she also exhibited symptoms of blood deficiency and hypothyroidism. As these conditions could impact overall health and increase the risk of symptom recurrence, additional OCNT was prescribed.

Iron is an essential element for supporting blood circulation, promoting hemoglobin production, and enhancing the oxygen-carrying capacity of red blood cells. Moreover, ascorbic acid, a form of vitamin C, has been shown to facilitate intestinal iron absorption, potentially providing a synergistic effect on circulation.²² Iodine is a critical component for thyroid hormone synthesis, and maintaining an adequate concentration is necessary to prevent hypothyroidism.²³ These

Table 2. OCNT used for regulation of inflammatory responses, moisture restoration, and skin hydration

Focus of improvement	Nutrients	Evidence	Prescribed products containing the nutrients
Regulation of inflammatory responses	Anthocyanins	Reduction of inflammatory markers such as CRP, IL-6, and TNF- α ⁹	Cyaplex A Granules, Heartberry Black,
	Omega-3	Blockade of the NF- κ B pathway and promotion of inflammation resolution through the production of resolvins and protectins ¹⁰	Eufaplex Alpha Capsule
	Glycyrrhizin, dipotassium glycyrrhizate (DPG)	Inhibition of the pro-inflammatory gene HMGB1, contributing to decreased inflammatory responses ¹¹	Licoplex Granules, Licoplex Liquid
	Curcumin	Suppression of NF- κ B signaling and reduction of adhesion molecule expression involved in inflammation, such as ICAM-1 and VCAM-1, aiding in inflammation regulation ¹²	Curculpex Capsule
	MSM	Inhibition of the IL-1 β pathway and increase of anti-inflammatory cytokine IL-10 expression, improving inflammation ¹³	Sulfoplex Cream Mild
	Olive oil	Suppression of inflammation and promotion of dermal remodeling, as demonstrated in animal and clinical studies, facilitating wound healing ¹⁴	Cyaplex Balm
Moisture restoration and skin hydration	Alginate	Moisture absorption, helping to increase body water content ¹⁵	Cyaplex A Granules
	Mucin	Adhesion to the intestinal barrier and support of mucus and barrier restoration when administered orally ¹⁶	EZplex Granules
	Minerals	Regulation of osmotic pressure and promotion of water absorption, an essential nutrient for maintaining hydration ¹⁷	Aqua SAC Pure, Cyaplex Mineral Rock Salt
	Hyaluronic acid	High water retention due to abundant carboxyl and hydroxyl groups; topical application reported to increase skin hydration ¹⁸	Cyaplex Hydro Cream
	Sunflower seed oil	High linoleic acid content, helping to preserve the stratum corneum barrier and improve skin hydration ¹⁴	Cyaplex Balm

nutrients were supplied through the administration of Hemoplex, Thyroplex F, and Vivacell C.

As this case study involved a single patient, there are limitations in applying the same OCNT to all individuals with dyshidrotic eczema. However, the OCNT prescribed based on the patient's symptoms and overall health resulted in improvement of her dyshidrotic eczema, enhanced satisfaction with the treatment, and reduced discomfort in daily activities. Therefore, this report is presented with the patient's consent.

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