

세포교정영양요법(OCNT)을 이용한 건성습진 개선 사례

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

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ABSTRACT

Objective: A case report on the improvement of xerotic eczema through Ortho-Cellular Nutrition Therapy (OCNT).

Methods: OCNT was administered to Korean women in their 60s and 70s who had been experiencing xerotic eczema for several years to decades.

Results: After the application of OCNT, there was a significant improvement in the symptoms of xerotic eczema and individual symptoms the patients had.

Conclusion: The application of OCNT can help alleviate symptoms in patients with xerotic eczema.

Keywords: Ortho-Cellular Nutrition Therapy (OCNT), xerotic eczema, frostbite, cold environments

Introduction

Xerotic eczema refers to eczema that occurs when the skin is dry. This symptom often occurs between autumn and spring, especially during the mostly dry winter season, hence it is also called "winter eczema." It occurs frequently in young people but is predominantly found in the elderly.¹

The symptoms of xerotic eczema include dryness, skin cracking, excessive scaling, redness, erythema, pain, etc. Scales, in this case, may cause the dry skin to rise like 'cracked pottery' or 'a dry riverbed'.² Occasionally, the skin may thicken or hyperpigmentation may occur. These symptoms mainly develop on the arms and legs, particularly the shins, and also frequently occur on exposed areas such as the nose, ears, and face.

Xerotic eczema is often caused by decreased lipids on the surface of the skin consisting of the lipid layer, dermis, and epidermis or by functional skin disorders. In such cases, increased moisture loss through the epidermis from the stratum corneum decreases the skin's moisture content. This situation causes the epidermis to contract and leads to excessive scaling and itching.³

These symptoms can occur when exposed to cold and dry environments for extended periods. Conversely, they can be exacerbated by using too hot water and harsh cleansers for showering or bathing without moisturizing afterward.¹ Therefore, it is crucial to reduce behaviors that may irritate the skin and to manage humidity and moisturize using oily lotions.⁴

Despite these preventive measures, when xerotic eczema does occur, it can be treated with oral medications, topical steroids, and antihistamines.⁴ However, most treatments rely on symptomatic relief, and prolonged use of steroids can lead to increased infection risks, skin atrophy, and delayed wound healing, necessitating caution in their prescription and use.⁵

This case study targeted two patients who had long-standing xerotic eczema and exhibited significant improvement of symptoms following Ortho-Cellular Nutrition Therapy (OCNT).

Case Study

1. Subjects

Two cases of xerotic eczema, referred to as Patient A and Patient B.

- Patient A

- 1) Name: Jung O (F/61)
- 2) Diagnosis: Xerotic eczema, dry skin
- 3) Date of Onset: Several years ago
- 4) Treatment Duration: February 2022 ~ June 2022
- 5) Primary Symptoms: Cracking on the backs of the hands, thinning facial skin, dryness in the ears, leg numbness, dizziness

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- 6) Medical history: Frostbite, long-term work in cold environments
 7) Social history: None
 8) Family history: None
 9) Medications and Treatments Applied: Nutritional deficiencies and dehydration due to severe imbalanced diet

- Patient B

- 1) Name: Kim O O (F/84)
 2) Diagnosis: Xerotic eczema, dry skin
 3) Date of Onset: Several decades ago
 4) Treatment Duration: March 2022 ~ November 2022
 5) Primary Symptoms: Cracking at the fingertips and toes, pain, numbness, onychomycosis
 6) Medical history: Frostbite, frequent exposure to cold environments
 7) Social history: None
 8) Family history: None
 9) Medications and Treatments Applied: Hypertension, antihistamines, topical steroids, knee pain medication, Donepezil 5mg tablets

2. Methods

Detailed OCNT prescriptions for each patient are shown in Table 1 and Table 2.

Results

Patient A indicated a cracking on the backs of the hands, thinning of the facial skin, and severe dryness in the ears. Other reported issues were leg numbness and dizziness. After one month of applying OCNT, there was significant improvement in leg numbness and dizziness, suggesting a good adaptation to OCNT. Therefore, OCNT was continued with an increased variety of prescriptions. After four months of treatment, not only were the primary symptoms of dry skin and scaling significantly improved, but also the attending physician determined that proper moisturizing care alone would be sufficient. The severity of symptoms experienced by Patient A during OCNT is detailed in Table 3.

In the case of Patient B, symptoms included cracking at the fingertips and toes, numbness, and pain at the affected sites, along with joint pain and fatigue. Although the skin had become hardened with scales and cracks, gradual improvement in symptoms appeared two months after starting OCNT. The prescription was continued to suit the patient, and by the fifth month, the symptoms had almost completely disappeared. The severity of symptoms experienced by Patient B during OCNT is detailed in Table 4.

Discussion

Patient A, a woman in her 60s, frequently exposed to cold environments, experienced frostbite and continued to suffer similar symptoms due to repeated exposure to cold work environments. This led to thinning of the facial skin, persistent skin dryness, and erythema. Whenever the symptoms worsened, she applied steroids and moisturizing topical agents sporadically, which provided only temporary relief.

Patient B, a woman in her 80s, initially suffered frostbite while washing clothes by a cold stream in her youth and subsequently endured prolonged exposure to cold environments, leading to chronic and entrenched symptoms of scaling and cracking in her hands and feet. This patient also used symptomatic medications and long-term topical steroids, which failed to show significant improvement. Therefore, both patients underwent OCNT to address the underlying causes.

Both patients shared common experiences of frostbite and frequent exposure to cold environments, which likely triggered and sustained their symptoms. This exposure weakened their antioxidant function and led to eczema becoming entrenched due to aging-related immune decline.

The anthocyanins abundantly present in Cyaplex reduce oxidative stress, thereby enhancing antioxidant capabilities. They also decrease the expression of inflammatory markers TNF- α and IL-1 β , aiding in immune activation. Particularly, anthocyanins extracted from Aronia have been reported to exhibit superior antioxidant effectiveness compared to those

Table 1. Table 1. OCNT Prescription Details for Patient A.

Type / Duration	1 month	2 months	3 months	4 months	Remarks
Cyaplex A granules	101	101	101	101	
NO booster capsule	202	202	202	202	
Hemoplex capsule	202	202	202	202	
Eufaplex Alpha stick	-	101	101	101	
Diverol capsule	-	101	101	101	
Cyaplex balm	Apply a suitable amount to the affected area 2-3 times a day.				Dilute the above prescription in 1L of water for divided doses
Heartberry black	1 packet per day	1 packet per day	1 packet per day	1 packet per day	
Cyaplex mineral bamboo salt	1 packet per day	1 packet per day	1 packet per day	1 packet per day	
Aqua SAC pure	1 packet per day	1 packet per day	1 packet per day	1 packet per day	

* 101: Twice a day, one capsule/packet per dose; 202: Twice a day, two capsules/packets per dose.

Table 2. OCNT Prescription Details for Patient B.

Type / Duration	1 month	2 months	3 months	4 months	5~9 months
Cyaplex X granules	101	101	101	101	101
NO booster capsule	101	101	202	202	202
Viva circu capsule	101	101	101	101	101
Caroplex capsule	-	-	202	202	202
Sulfoplex PK tablet	404	404	404	404	404
Sulfoplex cream	Apply a suitable amount to the affected area 2-3 times a day.				

* 101: Twice a day, one capsule/packet per dose; 202: Twice a day, two capsules/packets per dose; 404: Twice a day, four capsules/packets per dose.

extracted from other berries or plants.⁶

Additionally, zinc plays a role in regulating immune responses through its bioavailability, which is controlled by various transporters and regulatory factors. Manganese acts as a co-factor for numerous enzymes and plays a crucial role in regulating immune responses and neural activities. Deficiencies in these nutrients can lead to decreased immune function and increased inflammation.^{7,8} Therefore, both patients were supplemented with zinc and manganese through NO booster to enhance their immune capabilities and reduce inflammatory responses.

Patient A, a woman in her 60s, had suffered from severe picky eating, leading to nutritional imbalances and chronic dehydration. As a result, the use of steroidal drugs and moisturizing external agents was only effective as a temporary remedy. Additionally, OCNT was prescribed to address her symptoms of lower limb numbness and dizziness.

Omega-3, Eufaplex's main ingredient, has been reported to have anti-inflammatory effects on various skin conditions, including psoriasis and atopic dermatitis.⁹ Moreover, lanolin contained in Cyaplex balm, a substance secreted by sheep sebaceous glands, is extensively used to alleviate symptoms associated with dry skin in the elderly.¹⁰

A deficiency in iron can lead to dry and rough skin, paleness, and dizziness due to inadequate oxygen supply in the body.¹¹ Therefore, Hemoplex was used to provide sufficient heme iron to help alleviate both the patient's skin symptoms and dizziness. Additionally, Diverol was administered to supply Vitamin D, which possesses strong immunomodulatory properties. Deficiency in this nutrient can lead to symptoms such as numbness commonly associated with rheumatoid arthritis and myopathy.¹²

Patient B consistently reported numbness and pain in affected areas when exposed to cold environments. Additionally, her pre-existing hypertension likely contributed to circulatory issues, limiting the effectiveness of drug treatments. Therefore, a tailored OCNT was prescribed to alleviate these issues.

Sulfoplex, containing Methylsulfonylmethane (MSM), provides sulfur necessary for the synthesis of skin health-related substances like collagen and hyaluronic acid. Studies have shown that MSM intake can reduce wrinkles and skin

roughness compared to a placebo.¹³ It also affects various mechanisms such as regulating the expression of RUNX2, an upstream signal of SP7 that controls the expression of various bone formation genes, contributing to joint protection.¹⁴ Since Patient B was already taking medication for knee pain, both the oral Sulfoplex PK tablet and the topical Sulfoplex cream were applied to manage her skin symptoms and joint pain simultaneously.

Viva circu, containing *ginkgo biloba* extract, has been known for its antioxidant properties, with numerous studies showing improved blood flow in groups receiving ginkgo biloba extract.¹⁵ Additionally, the various carotenoids in Caroplex have been shown to reduce fatigue perception as intake increases.¹⁶ The components ingested through OCNT were used to enhance the body's internal circulation and reduce fatigue.

As described above, the tailored OCNT led to significant improvements in the eczema symptoms of each patient. Particularly, both patients, being elderly and having suffered symptoms for many years, showed significant alleviation of discomfort, which is considered highly meaningful.

This case study has limitations in universally applying to all patients with xerotic eczema. However, the significant improvement in eczema symptoms and overall quality of life through tailored OCNT is deemed meaningful. The report is made with the patient's consent.

References

1. Norman RA. Xerosis and pruritus in the elderly: recognition and management. *Dermatol Ther.* 2003;16(3):254-9.
2. Cassler NM, Burris AM, Nguyen JC. Asteatotic eczema in hypoesthetic skin: a case series. *JAMA Dermatol.* Oct 2014;150(10):1088-90.
3. Akimoto K, Yoshikawa N, Higaki Y, Kawashima M, Imokawa G. Quantitative analysis of stratum corneum lipids in xerosis and asteatotic eczema. *J Dermatol.* Jan 1993;20(1):1-6.

Table 3. Symptom Severity During OCNT for Patient A.

Symptom / Duration	1 month	2 months	3 months	4 months
Skin dryness	5	3	2	1
Scale	4	3	2	0
Lower limb numbness	4	2	1	0
Dizziness	4	2	1	0

0: No symptoms, no interference with daily life; 1: Mild symptoms, almost no effect on daily life; 2: Moderate symptoms, some discomfort in daily life; 3: Significant symptoms, discomfort in performing some activities; 4: Severe symptoms, great difficulty in daily activities; 5: Symptoms make activities almost impossible, causing significant daily discomfort.

Table 4. Symptom Severity During OCNT for Patient B.

Symptom / Duration	1 month	2 months	3 months	4 months	5-9 months
Skin dryness	5	3	1	1	0
Splitting of fingertips and toes	5	4	2	1	0
Pain	5	4	2	0	0
Numbness	4	2	0	0	0
Fatigue	4	2	1	1	1

0: No symptoms, no interference with daily life; 1: Mild symptoms, almost no effect on daily life; 2: Moderate symptoms, some discomfort in daily life; 3: Significant symptoms, discomfort in performing some activities; 4: Severe symptoms, great difficulty in daily activities; 5: Symptoms make activities almost impossible, causing significant daily discomfort.

4. Ng SY, Begum S, Chong SY. Does Order of Application of Emollient and Topical Corticosteroids Make a Difference in the Severity of Atopic Eczema in Children? *Pediatr Dermatol*. Mar-Apr 2016;33(2):160-4.
5. Grennan D, Wang S. Steroid Side Effects. *Jama*. 2019;282.vol. 3.
6. Banach M, Wiloch M, Zawada K, Cyplik W, Kujawski W. Evaluation of Antioxidant and Anti-Inflammatory Activity of Anthocyanin-Rich Water-Soluble Aronia Dry Extracts. *Molecules*. Sep 4 2020;25(18)
7. Bonaventura P, Benedetti G, Albarède F, Miossec P. Zinc and its role in immunity and inflammation. *Autoimmun Rev*. Apr 2015;14(4):277-85.
8. Chen P, Bornhorst J, Aschner M. Manganese metabolism in humans. *Front Biosci (Landmark Ed)*. Mar 1 2018;23(9):1655-1679.
9. Sawada Y, Saito-Sasaki N, Nakamura M. Omega 3 Fatty Acid and Skin Diseases. *Front Immunol*. 2020;11:623052.
10. White-Chu EF, Reddy M. Dry skin in the elderly: complexities of a common problem. *Clin Dermatol*. Jan-Feb 2011;29(1):37-42.
11. Lopez A, Cacoub P, Macdougall IC, Peyrin-Biroulet L. Iron deficiency anaemia. *The Lancet*. 2016;387(10021):907-916.
12. Athanassiou L, Kostoglou-Athanassiou I, Koutsilieris M, Shoenfeld Y. Vitamin D and Autoimmune Rheumatic Diseases. *Biomolecules*. Apr 21 2023;13(4)
13. Muizzuddin N, Benjamin R. Beauty from within: Oral administration of a sulfur-containing supplement methylsulfonylmethane improves signs of skin ageing. *Int J Vitam Nutr Res*. Jul 2022;92(3-4):182-191.
14. Toguchi A, Noguchi N, Kanno T, Yamada A. Methylsulfonylmethane Improves Knee Quality of Life in Participants with Mild Knee Pain: A Randomized, Double-Blind, Placebo-Controlled Trial. *Nutrients*. Jun 30 2023;15(13)
15. Wu YZ, Li SQ, Zu XG, Du J, Wang FF. Ginkgo biloba extract improves coronary artery circulation in patients with coronary artery disease: contribution of plasma nitric oxide and endothelin-1. *Phytother Res*. Jun 2008;22(6):734-9.
16. Kleckner AS, van Wijngaarden E, Jusko TA, et al. Serum carotenoids and cancer-related fatigue: An analysis of the 2005-2006 National Health and Nutrition Examination Survey. *Cancer Res Commun*. Mar 2022;2(3):202-210.