

세포교정영양요법(OCNT)을 이용한 족부 침연 개선 사례

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A Case Report of Foot Maceration Improved by Ortho-Cellular Nutrition Therapy (OCNT)

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ABSTRACT

Objective: When the skin remains excessively moist, it undergoes a process known as maceration, which results from prolonged exposure to moisture. The feet are particularly prone to persistent moisture, which may lead to skin lesions such as maceration, scaling, fissures, and erythema.

Case Report: The patient was a Korean adolescent male who presented to a pharmacy in June 2026 with maceration of both feet. Ortho-Cellular Nutrition Therapy (OCNT), including zinc, vitamin C, and anthocyanins, was administered. After 1 month, improvements in scaling and skin peeling associated with maceration were observed.

Conclusion: The patient's foot maceration showed marked improvement following OCNT. Although this individualized intervention was applied to a single patient and therefore cannot be generalized to all patients with foot maceration, the clear improvement observed within a short period suggests potential clinical significance.

Keywords Ortho-Cellular Nutrition Therapy (OCNT), Skin, Foot, Maceration, Zinc, Vitamin C, Anthocyanins

Introduction

The skin is a complex organ that performs various functions, including maintaining temperature and fluid homeostasis, protecting underlying tissues and organs, and providing defense against infectious pathogens. When the skin remains excessively moist, it undergoes a process known as maceration, which results from prolonged exposure to moisture. This causes the skin to soften and break down, allows connective tissue fibers to separate easily, and often produces a whitish appearance. Moisture that can cause skin maceration exists in various forms, including perspiration, wound exudate, urine, feces, mucus, and saliva, all of which have important implications for clinical management.¹

The feet are particularly susceptible to prolonged exposure to moist environments, which may result in lesions such as maceration, scaling, fissures, and erythema. These findings are

commonly observed in interdigital tinea pedis but may also occur in conditions such as eczema, contact dermatitis, bacterial intertrigo, and candidal intertrigo. Several studies investigating interdigital lesions have reported that maceration may result from various causes, including eczema and fungal infection; therefore, the underlying etiology cannot be determined solely on the basis of maceration as a clinical finding. Accordingly, the evaluation of foot maceration should include not only clinical manifestations and relevant exposure factors but also the possibility of fungal and bacterial infections.²

Maceration can weaken the skin barrier and cause fissures, thereby increasing the risk of further skin damage and infection. In a study involving patients with diabetic foot ulcers, wounds without maceration healed more rapidly than those with maceration, and maceration was identified as an independent predictor of wound healing. However, maceration has generally been documented as an incidental observational finding in many studies, and standardized assessment criteria for objectively evaluating its severity or monitoring treatment response have not yet been adequately established.³

In May 2026, the patient reported peeling of the plantar skin accompanied by severe foot odor. Ortho-Cellular Nutrition Therapy (OCNT) was subsequently initiated, and the patient was instructed to maintain consistent intake of the prescribed nutrients and regular use of topical agents. After 2 months of

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Received Jul 29, 2026; Revised Jul 30, 2026; Accepted Jul 31, 2026;

Published Jul 31, 2026

doi: <http://dx.doi.org/10.5667/CellMed.spc.176>

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

OCNT, marked improvement in foot maceration was observed. Therefore, with the patient's consent, I report this case.

Case Study

1. Subject

This case involved one patient with foot maceration.

- 1) Name: OOO (14 years old/M)
- 2) Diagnosis: Foot maceration
- 3) Date of onset: January 2022
- 4) Treatment period: May 17, 2026–July 2026
- 5) Chief complaint: Foot maceration
- 6) Past medical history: None
- 7) Social history: None
- 8) Family history: None
- 9) Present illness and current medications: Vitamin B, vitamin C, and an iron supplement

2. Methods

The following OCNT regimen was prescribed:

Cyaplex X tablet 002 (2 tablets once daily)
Vivarol capsule 101 (1 capsule twice daily)
Vivacell C capsule 100 (1 capsule once daily)
Hemoplex capsule 202 (2 capsules twice daily)
Tmplex F capsule 101 (1 capsule twice daily)

In addition, the patient was instructed to use Cyaplex cleansing bar and to apply Cyaplex balm and Sulfoplex cream mild twice daily.

Results

The patient presented to a pharmacy after foot maceration was identified in May 2026. The patient underwent OCNT with the prescribed nutrients and maintained consistent intake for 1 month. The foot maceration was subsequently found to have almost completely resolved, and the changes are presented in Fig. 1.

Discussion

The patient was an adolescent in the growth stage and reported that peeling of the plantar skin had begun after he started practicing taekwondo 4 years earlier. To improve the condition of the plantar skin, his guardian had applied medications and products such as petroleum jelly and had taken him to a dermatology clinic; however, the skin condition did not improve. Frequent foot odor was reported, and whitish scaling and skin peeling were observed on the feet and in the interdigital areas. Given the patient's high level of physical activity and the resulting repeated exposure of the feet to perspiration, this moist environment was considered to have contributed to the development of maceration. Therefore, an individualized nutrient regimen was prescribed with the aim of promoting skin regeneration and protection.

First, restoration of the skin barrier was considered important for improving the scaling and skin peeling caused by foot maceration. Hemoplex capsules prescribed to the patient contained a high amount of zinc. Zinc is an essential trace element that plays important roles in human physiology and is a micronutrient involved in cell membrane repair, cellular proliferation and growth, immune function, and metabolism.



(A)



(B)



(C)



(D)

Fig. 1. Photographs of the patient's interdigital areas before and after OCNT. (A) and (B) were taken on May 17, 2026, and (C) and (D) were taken on June 26, 2026. A reduction in maceration and an improvement in the skin condition were observed following OCNT.

Zinc is also involved in the regulation of the wound-healing process.⁴ Therefore, zinc was prescribed to support the improvement of scaling and skin peeling observed on the patient's feet.

In addition, the Vivacell C capsules prescribed to the patient contained a high amount of vitamin C. Vitamin C is deeply involved in wound healing through its anti-inflammatory and antioxidant activities and contributes to collagen synthesis, maturation, secretion, and degradation.⁵ Because restoration of the dermal connective tissue and collagen synthesis were considered necessary in the patient's feet affected by maceration, vitamin C was prescribed to support the regeneration of tissues weakened by maceration and thereby contribute to symptom improvement.

Lastly, anthocyanins contained in Cyaplex X tablets, Cyaplex cleansing bar, and Cyaplex balm are polyphenolic compounds commonly found in fruits and vegetables and exhibit various biological activities, including antioxidant, antimicrobial, and anticancer effects. Anthocyanins are also known to influence wound healing and angiogenesis. An animal study reported that anthocyanins increased the expression of angiogenesis-related proteins, including vascular endothelial growth factor (VEGF) and CD31, while inhibiting the translocation of p65, a component of the inflammation-related nuclear factor kappa B (NF- κ B) signaling pathway.⁶ Studies have also reported beneficial effects of anthocyanins on keratinocyte recovery. In one study evaluating anthocyanin activity in HaCaT human keratinocytes, anthocyanins shortened the time required for keratinocyte formation by more than 50%, thereby accelerating cellular damage repair.⁷ Therefore, anthocyanins were prescribed to support the recovery of the macerated epidermal tissue and exert beneficial effects on keratinocytes.

The patient continuously followed the OCNT regimen for 1 month beginning in June 2026. Active nutrient supplementation and a potential reduction in the toxin burden that may arise during growth may have contributed to symptom improvement, and a marked visible improvement was observed. Although this report describes a single case and its findings cannot be generalized to all patients with foot maceration, the marked improvement observed within a short period was considered to be of clinical significance. Therefore, this case is reported with the consent of the patient.

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