

세포교정영양요법(OCNT)을 이용한 여드름 개선 사례 연구

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A Case study on the improvement in acne patient using Ortho-Cellular Nutrition Therapy (OCNT)

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ABSTRACT

Objective: Case study on the improvement of acne through application of Ortho-Cellular Nutrition Therapy (OCNT)

Method: Implementation of OCNT on a 25-year old Korean male due to severe acne symptoms

Results: Symptoms such as skin rash and wounds as well as the overall skin conditions improved following the implementation of OCNT.

Conclusion: Application of OCNT can be helpful in alleviation of symptoms in patients suffering from acne.

Keywords Ortho-Cellular Nutrition Therapy (OCNT), acne, suppurative acne, nodular acne

Introduction

Acne is a chronic inflammatory disease that occurs in the sebaceous glands of the hair follicle due to the stimulation of sebum secretion arising from hormonal imbalance, which is caused by physical growth and the development of secondary sexual characteristics acne. Although it manifests in the mid-teens and disappears naturally in most cases, the prognosis aggravates and the inflammation becomes chronic as it continues into adulthood in some cases. Although the etiology of acne is still not fully understood, the general pathogenesis is as follows:

I. It is caused by a combined pathology of hormonal and bacterial inflammation of the sebaceous glands. Moreover, inflammatory lesion is manifested due to the combination of accumulation in the hair follicle of large quantity of sebum secreted from sebaceous

glands that are overstimulated by dihydrotestosterone (DHT), whose secretion increases mainly during puberty, and bacterial proliferation (*Propionibacterium acnes*) in the closed hair follicle due to closed pores. In other words, it is a combined pathology of excessively secreted sebum and bacterial inflammation.

- II. Various causes of excessive sebaceous gland secretion include hormone imbalance, sugar (diet causing high glycemic index (GI)), excessive intake of meat fat (deficiency of essential unsaturated fatty acids), overwork and stress, decreased detoxification metabolic function in the liver. In particular, deterioration of intestinal flora environment causes weakened immune system, increased endotoxin and activation of yeast infection in the skin mucous membrane system, thereby affecting the aggravation and chronicity of acne. Other causes include abnormal irritation and side effects of oral contraceptives, side effects of medicines, facial cleansing solvents, cosmetics and neglecting of cleanliness, etc.
- III. Symptoms include comedones, blackheads, papules, pustules, nodules and cysts on the face and chest, and in severe cases, scars.

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Case

1. Subject

It is conducted on 1 case of acne patient.

- 1) Name: ○ Ban (M/25 years)
- 2) Name of diagnosis: Suppurative acne (common acne)
- 3) Date of manifestation: June 2022 (estimated) ~ began to aggravate
- 4) Treatment period: December 19, 2022 ~ Mid-April 2023
- 5) Main symptoms: Nodular acne, suppurative acne, rash, rubefaction, slight pruritis, avoiding interpersonal relationship
- 6) Past medical history: None
- 7) Past social history: None
- 8) Past family history: None
- 9) Current medical conditions and medication being administered: None

2. Method

A) Orally administered products

Cyaplex X Granule (101, 1 sachet at a time for 2 times a day)

Licoplex Granule (101, 1 sachet at a time for 2 times a day)

Hwapyeongwon Granule (101, 1 sachet at a time for 2 times a day)

Collaplex Granule (101, 1 sachet at a time for 2 times a day)

Bioplex F Granule (101, 1 sachet at a time for 2 times a day)

Eufaplex Alpha Capsule (101, 3 capsules at a time for 2 times a day)

B) Externally applied products (used on skin surface at the time of and following facial wash)

Cyaplex Balm

Cyaplex Hydro Cream

Cyaplex Cleansing Bar

C) Dietary management

Refrain from instant and wheat flour foods, and dairy products.

Results

Initial conditions of the patient included severe rashes and rubefaction along with feeling itchiness. Lack of confidence arising from these symptoms affected his interpersonal relationships, thereby resulting in high level of depression. Two months after the implementation of OCNT, rashes and rubefaction subsided slightly (**Fig. 1**).

As time passed thereafter, the acne symptoms improved further and the conditions of the patient displayed even further improvements up to the present (**Table 1**).



Fig. 1. Comparison of the patient's acne symptoms before and after the implementation of OCNT. Acne began to aggravate in June 2022. Although the patient attempted various treatments since then, he could not achieve any improvement with rash continuing to be in severe state. About 3 months after the implementation of OCNT, rash was significantly reduced and the microscopic wounds were also noticeably reduced.

Table 1. Extent of symptoms experienced by the patients during OCNT. On a scale of 1 to 5, the greater the discomfort experienced by the patient for higher value.

SYMPTOMS	1 MONTH OF OCNT	2 MONTHS OF OCNT	3 MONTHS OF OCNT	4 MONTHS OF OCNT	RECENT
RASH	5	2	1	0	Fair
RUBEFACTION	5	3	2	1	
ITCHINESS	3	2	1	0	
DEPRESSION	5	2	1	1	

Considerations

Anthocyanin contained in Cyaplex X is a potent antioxidant and can help stabilize the barrier function of the skin and skin lipids by preventing free radicals generated from various metabolic processes in the organisms.¹

Marine algae extracted ingredients such as alginic acid are reported to have a moisturizing effect on the skin like hyaluronic acid, which is essential for maintaining a healthy skin balance.²

Glycyrrhizin, which is one of the main flavonoids found in licorice, has anti-inflammatory and antibacterial properties. Previously, glycyrrhizin has been reported to have anti-acne effects through inhibition of the PI3K-Akt signaling pathway and mitochondrial activity.³

It is known that 2 factors, namely, oxidative stress and inflammatory process, are involved with the manifestation of acne symptoms. Silymarin contained in Licoplex is reported to have antioxidation and anti-inflammatory properties. Silymarin, similar to Doxycycline used in the treatment of acne, can be considered as one of the treatment methods for acne and its effects have been reported through clinical trials.⁴

Collagen, a component of Collaplex, is known to have skin health benefits, including strengthening skin structure, preventing and treating scars, promoting skin regeneration and improving resilience, etc. Collagen has also been known to be beneficial in the treatment of acne through methods such as percutaneous collagen induction.⁵ However, the effects of collagen through oral ingestion may vary in individuals.

Probiotics in Bioplex help to alleviate allergic and inflammatory skin disorders. In particular, lactobacillus has been reported to be effective in regulating T-cell-mediated skin inflammation without inducing immunosuppression, which can be helpful in the improvement of symptoms by reducing inflammation caused by acne.⁶

Consumption of essential unsaturated fatty acids through Eufaplex by acne patient can be helpful in alleviating relevant symptoms as there is a report that 10 weeks of omega-3 fatty acid or gamma-linolenic acid

supplementation reduced inflammatory and non-inflammatory acne lesions in acne patients.⁷

In addition, since there is a report that the cyanidin-hyaluronic acid complex in Cyaplex Balm, Cyaplex Hydro Cream, and Cyaplex Cleansing Bar can inhibit the growth of bacteria that can colonize chronic wounds where the skin does not heal and continues to be damaged, and that scars were alleviated when applied to areas such as acne scars, these products can be helpful in the improvement of skin rash and rubefaction in the acne patient.^{8,9}

The patient in this case, a 25-year old male with aggravation of acne since he was discharged from the armed service. Although he was subjected to treatments at a dermatology clinic and treatment using oriental herbal medicine, he could not achieve any improvement. As such, he decided to try OCNT following consultation in the presence of his guardian.

Although the patient was required to take the products 2 times a day, he could only do so once a day during weekdays due to his busy schedule. In spite of the short period of implementation of OCNT, the patient effectively managed to improved his acne symptoms by adhering to a healthy diet regime and putting efforts to improve his living environment in addition to the implementation of OCNT. It is being reported with the consent of the patient as it is thought to be a case in which the patient was able to resume his social activities by regaining confidence towards interpersonal relationship through the implementation of OCNT.

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