

세포교정영양요법(OCNT)을 이용한 종기 개선 사례 보고

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

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ABSTRACT

Objective: Furuncles are localized infections of the hair follicles and can occur on any part of the body where they are present. They typically appear as solitary lesions but may progress to furunculosis in cases of recurrent occurrences. Furuncles are characterized by inflammation of the hair follicle and are accompanied by symptoms such as erythema, localized heat, and pain. The primary causative agents are *Staphylococcus* species. Diagnosis is usually straightforward based on the characteristic appearance of the lesion and visual inspection of the affected area and surrounding skin; however, if necessary, microbiological diagnosis can be performed using Gram staining or bacterial culture.

Case Report: The patient in this case study is a Korean male in his 50s who experienced recurrent inflammation in various parts of his body. During this period, a furuncle approximately 2 cm in size developed in the buttock area. In response, Ortho-Cellular Nutrition Therapy (OCNT) was applied, prescribing *Platycodon grandiflorum*, *Paeonia lactiflora*, jujube, and bromelain. The furuncle subsided within two days of nutrient administration, and the discolored skin tissue returned to normal within six days.

Conclusion: In this case study, the application of OCNT was found to improve the patient's furuncle. Although the study was conducted on a single patient and thus has limitations in being generalized to all individuals with furuncles, the marked improvement of symptoms within a short period and the enhancement of the patient's quality of life suggest that the results are meaningful.

Keywords Ortho-Cellular Nutrition Therapy (OCNT), furuncles, inflammation, infection, *Platycodon grandiflorum*, *Paeonia lactiflora*

Introduction

Furuncles are localized infections of the hair follicles and can occur on any part of the body where they are present. The infection can penetrate deeply into the subcutaneous tissue. The most common sites of occurrence include the neck, face, armpits, groin, and thighs.¹ Furuncles usually appear as solitary lesions affecting a single hair follicle but may progress to furunculosis, characterized by recurrent multiple furuncles. When the infection spreads to surrounding hair follicles, affecting multiple follicles, it is referred to as multiple follicular infection or a carbuncle.²

The clinical presentation of furuncles involves inflammation of the hair follicle accompanied by erythema, localized heat, and pain. The size of furuncles varies from 0.5 cm to 5 cm depending on the stage of maturation and gradually increases over time. Therefore, if left untreated in the early stages, the infection progresses, and inflammatory signs worsen. At this point, pus accumulates in the localized area, causing tenderness, and an abscess may form. As pus builds up internally, the lesion enlarges, the skin becomes swollen, and the surrounding tissue turns purplish. Additionally, inflamed hair follicles can be observed around the lesion, and the lesion surface often shows a white or yellow pustule-like core. Furuncles naturally drain pus and form a fistula on the skin surface.³

Most infectious diseases affecting hair follicles are caused by bacteria, with *Staphylococcus* species being the primary causative agents. Among them, *Staphylococcus aureus* is most closely associated with skin infections. Cases caused by various other bacteria or fungi have also been reported. Meanwhile, risk

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factors that can cause or worsen follicular infections include obesity, diabetes, and immunosuppression.⁴

Diagnosis of furuncles is relatively simple compared to other diseases and is made through visual inspection of the lesion and surrounding skin. Furuncles can be easily distinguished by their characteristic appearance. If there is diagnostic uncertainty or if pus is discharged from the furuncles, accurate microbiological diagnosis can be made using Gram staining or bacterial culture. In most cases, a precise diagnosis can be made based solely on the symptoms and signs of infection; however, in atypical presentations or when there is a possibility of a neoplastic lesion, soft tissue ultrasound may be performed. Additionally, in cases of furunculosis, the possibility of immunodeficiency, immune dysfunction, or neoplastic disease must be carefully considered.⁵

The patient in this case study developed a furuncle on the buttock and experienced discomfort due to recurrent inflammation in multiple areas. Accordingly, Ortho-Cellular Nutrition Therapy (OCNT) was applied to improve the patient's quality of life.

Case Study

1. Subject

This case study involved one patient with furuncles.

- 1) Name: Park OO (50 years old / M)
- 2) Diagnosis: Furuncles on the buttock
- 3) Date of onset: April 5, 2025
- 4) Treatment period: April 8, 2025 – April 15, 2025
- 5) Chief complaints: Furuncles with erythema and pain
- 6) Medical history: None
- 7) Social history: Smoking (1 pack per day for 20 years); Alcohol consumption (1 bottle per week for 20 years)
- 8) Family history: None
- 9) Current illness and medications: None

2. Method

The following OCNT was prescribed:
Tricodon Capsules (222, three times daily, two capsules per dose)

Additionally, the following formulation was prescribed:
Endymela Tablets (222, three times daily, two tablets per dose)

Results

The furuncle lesion subsided and flattened by the second day after OCNT administration and nutrient intake. Although the inflamed area and its surroundings were discolored and hardened, the skin in the affected region returned to normal within six days, leaving only a slight dark scar. Changes in the patient's symptoms following OCNT treatment are presented in Table 1.

Discussion

The patient in this case study was a 50-year-old male who reported a furuncle approximately 2 cm in size on the buttock on April 5, 2025. The patient had poor personal hygiene and experienced recurrent inflammation in multiple areas. Furuncles are diseases caused by localized infection of the hair follicles. In this case study, bacterial infection and suppurative inflammation were considered the primary causes attributed to poor hygiene.

Table 1. The severity of symptoms experienced by the patient during OCNT. A scale from 0 to 5 indicates increasing levels of discomfort reported by the patient.

Date Type:	April 8, 2025	April 10, 2025	April 15, 2025	Remarks
Furuncles on the buttock	5	3	1	The 2 cm furuncle was removed, leaving only a scar.

0: No symptoms and no impact on daily life; 1: Mild symptoms with little impact on daily life; 2: Noticeable symptoms requiring some adaptation in daily life; 3: Symptoms significantly affect daily life, causing difficulty in performing some activities; 4: Significant difficulty performing activities during daily life; 5: Discomfort in daily life accompanied by severe stress caused by symptoms.

Accordingly, OCNT was prescribed to reduce the patient's inflammation and enhance immune function.

First, the prescribed Tricodon Capsules contain the herbal medicine *Platycodon grandiflorum*. *Platycodon grandiflorum* is a perennial herb belonging to the *Campanulaceae* family, known as “doraji” in Korea.⁶ Doraji has traditionally been used in Korean herbal medicine to treat respiratory diseases and has been reported to exhibit various pharmacological activities. In particular, its root is rich in a saponin compound called platycodin, which demonstrates a wide range of biological effects, including anti-inflammatory, anti-cancer, anti-obesity, and immune-enhancing actions. These effects are attributed to platycodin's ability to regulate the production of inflammatory cytokines and nitric oxide, thereby contributing to its anti-inflammatory activity.⁷ The patient complained of pain caused by follicular inflammation, and anti-inflammatory nutrients were prescribed to alleviate the symptoms.

In addition, Tricodon Capsules also include *Paeonia lactiflora* with anti-inflammatory activity comparable to that of *Platycodon grandiflorum*. *Paeonia lactiflora* is a well-known herbal medicine that has been used for over 1,200 years in East Asian countries, including Korea, China, and Japan. It has primarily been used to treat rheumatoid arthritis, systemic lupus erythematosus (SLE), and dysmenorrhea. According to several studies, *Paeonia lactiflora* has demonstrated anti-inflammatory effects in models of acute and subacute inflammation by suppressing the production of prostaglandin E2, leukotriene B4, and nitric oxide, as well as inhibiting intracellular calcium elevation. Additionally, in cell-based experiments, *Paeonia lactiflora* has been shown to help protect cells from oxidative stress.⁸ Accordingly, in this case study, *Paeonia lactiflora* was prescribed to alleviate the patient's inflammation.

Meanwhile, the OCNT prescription aimed not only to reduce the patient's inflammation but also to contribute to the fundamental enhancement of immune function. *Ziziphus jujube* (jujube) is a medicinal plant belonging to the *Rhamnaceae* family and is rich in various nutrients and phytochemicals. Pharmacological studies have reported that jujube exhibits sedative, anti-inflammatory, and immune-activating effects.⁹ One study reported that oral administration of jujube stimulated lymphocyte proliferation and increased levels of various interleukins and immunoglobulins in experimental animals. In addition, jujube was found to enhance the diversity of gut microbiota. This particularly increases the abundance of *Bacteroidetes* species, which are known to regulate immune

responses and protect the intestinal mucosa, thereby positively influencing gut health and the immune system.¹⁰ Therefore, it was concluded that the nutritional components of jujube contained in Tricodon Capsules would contribute to enhancing the patient's immune function.

Finally, bromelain was also prescribed to improve the patient's furuncles, reduce inflammation, and enhance immune function. Bromelain is a proteolytic enzyme extracted from the stem or fruit of pineapple and exhibits pharmacological effects such as reducing swelling, anti-inflammatory action, antithrombotic activity, and fibrinolytic activity. As a phytotherapeutic agent, it has minimal toxicity or adverse effects, making it safe for use in patients with various conditions. Currently, bromelain is widely used as an alternative therapy in the United States and Europe. It also functions as an immunomodulator, known to restore immune cell cytotoxicity and induce the production of specific cytokines such as TNF- α and interleukins.¹¹ Additionally, bromelain possesses enzymatic activity that removes inflammation. According to one study, molecules involved in leukocyte migration were removed in an environment exposed to bromelain, resulting in the inhibition of neutrophil IL-8-mediated migration.¹² Through this mechanism, bromelain suppresses the inflammatory response; therefore, it was prescribed to improve the patient's furuncle symptoms.

The patient in this case study had poor hygiene habits and experienced recurrent inflammatory reactions, with a large furuncle occurring on his buttock. OCNT was prescribed to improve the patient's overall health condition, and the patient reported symptom improvement within ten days of furuncle onset. Although this case study involved a single patient and therefore has limitations in generalizing to all furuncle cases, the clear symptom improvement within a short period and the enhancement of the patient's quality of life suggest meaningful results. Accordingly, this case study is reported with the patient's consent.

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