

세포교정영양요법(OCNT)을 이용한 족부 통증 개선 사례

김숙현 약학박사

경기도 부천시 원미구 부일로571번길 54 우리성모약국

A Case of Improved Foot Pain with Ortho-Cellular Nutrition Therapy (OCNT)

Doctor of Pharmacy, Sook-hyun Kim

Woori St. Mary's Pharmacy, 54, Buil-ro 571beon-gil, Wonmi-gu, Bucheon-si, Gyeonggi-do, Republic of Korea

ABSTRACT

Objective: Foot pain is recognized as an important clinical and public health concern because of its high prevalence and its substantial negative effects on physical function and quality of life. Its etiology is multifactorial, and individuals with foot pain are known to experience significant physical disability, limitations in activities of daily living, and an increased risk of falling.

Case Report: This case report describes a Korean male patient in his 60s who presented with foot pain whenever his right foot contacted the ground. He was treated with Ortho-Cellular Nutrition Therapy (OCNT), which involved the administration of supplements including methylsulfonylmethane (MSM), glucosamine, and collagen, and his pain was reported to have improved within a short period.

Conclusion: This case represents an individualized intervention performed in a single patient presenting with foot pain and therefore has inherent limitations with respect to its generalizability to all patients with foot pain. Nevertheless, this case is considered meaningful in that the patient demonstrated marked improvement in pain without requiring surgical treatment.

Keywords Ortho-Cellular Nutrition Therapy (OCNT), Foot pain, gait, joints, cartilage

Introduction

Foot pain is recognized as a significant clinical and public health concern because of its high prevalence and substantial negative impact on physical function and quality of life. Foot pain has been reported to affect approximately 20–37% of community-dwelling adults aged 45 years and older, and individuals with foot pain are known to experience significant physical disability, limitations in activities of daily living, and an increased risk of falling.¹

The etiology of foot pain is multifactorial, and inappropriate footwear selection may play an important role in its development. Wearing shoes that are excessively small relative to foot size, or shoes that lack adequate support and a stable structure, such as high-heeled shoes and slippers, has been reported to be associated with foot pain. In addition, the incidence of foot injuries resulting from traffic accidents has increased in recent years, which may be attributed to the fact that plantar-directed impact sustained by seat-belted front-seat passengers can cause

various injuries, including ligament damage and metatarsal fractures. In particular, in relation to traffic accidents, both the frequency and severity of injuries involving the tarsometatarsal joint, talonavicular joint, and ankle joint have been reported to increase.²

Foot pain may be associated with certain underlying conditions, including rheumatoid arthritis, gout, and osteoarthritis. It may also be related to pathological lesions in specific anatomical structures. A recent study evaluating the prevalence of foot symptoms in patients with rheumatoid arthritis reported that approximately 93.5% of respondents had experienced foot pain, and 35.4% reported foot pain as their initial symptom. Furthermore, approximately 70% of patients with acute gout attacks were reported to experience foot pain and functional impairment.³

An understanding of foot structure is important for accurately assessing foot pain. Foot structure is assessed by quantifying or classifying foot type based on the alignment of the medial longitudinal arch. Arch alignment has been measured using clinical assessment, radiographic evaluation, and plantar pressure trace-based methods, each of which demonstrates varying levels of reliability and validity. Although radiographic measurement is regarded as the reference standard for arch alignment assessment, it has the limitation that measurement errors may occur due to the nature of the examination.⁴

The patient presented with persistent foot pain, particularly noting that symptoms were triggered during the stance phase of

*Correspondence: Sook-hyun Kim
E-mail: truelovetrue70@naver.com

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gait. To alleviate these symptoms and enhance the patient's quality of life, symptom-specific Ortho-Cellular Nutrition Therapy (OCNT) was implemented.

Case Study

1. Subject

One patient with foot pain was included in this case report.

- 3) Date of onset: March 2025
- 4) Duration of treatment: January 2026 to present
- 5) Chief complaint: Foot pain, ankle swelling
- 6) Past medical history: Ankle sprain in youth
- 7) Social history: Habitual alcohol consumption
- 8) Family history: None
- 9) Current medical history and medications: Hypothyroidism (taking Synthroid), medications for dyslipidemia, history of cholecystectomy

2. Methods

The following OCNT regimen was prescribed.

- Sulfoplex PK tablet (202, two times daily, 2 tablets per dose)
Vivacosamine capsule (202, two times daily, 2 capsules per dose)
Collaplex granules (001, once daily, 1 sachet per dose)

Results

The patient reported that right foot pain was almost imperceptible two weeks after the initiation of OCNT. The patient also reported that, even when pain occurred intermittently, its intensity was alleviated by taking the prescribed supplements and that swelling of the foot had also decreased.

Discussion

The patient in this case presented with discomfort due to persistent foot pain and reported that pain was triggered whenever he placed his right foot on the ground. The patient visited a hospital and was advised by a specialist to undergo ankle surgery; however, because he did not wish to pursue surgical treatment, he visited a pharmacy and subsequently underwent OCNT. OCNT was administered for approximately 2 months, and approximately 2 weeks after its initiation, the patient reported that his pain intensity had decreased from 10 to approximately 1. The patient also stated that he habitually consumed alcohol and that he appeared to have a limping gait due to ankle pain. Accordingly, a tailored OCNT was applied based on a comprehensive consideration of the patient's lifestyle and symptoms.

Sulfoplex PK tablets prescribed to the patient contain methylsulfonylmethane (MSM), a compound primarily used to reduce joint pain and protect cartilage. In one clinical trial involving 49 subjects with radiographically confirmed knee osteoarthritis, administration of MSM resulted in improvements in pain and physical function in the group that received the supplement for 12 weeks.⁵ Therefore, in this case, MSM was applied based on the judgment that it could contribute to the alleviation of foot pain and the improvement of physical function.

Vivacosamine capsules prescribed to the patient contain glucosamine, an amino sugar that plays an important role in the

formation and maintenance of joint structures, including cartilage, ligaments, tendons, and synovial fluid. With regard to the pain-relieving effects of glucosamine on joints, a double-blind clinical trial conducted in patients with osteoarthritis observed significant clinical improvement in the glucosamine-treated group. In that study, the group that received glucosamine for 16 weeks showed a significant reduction in pain at rest, as well as a statistically significant reduction in pain during movement.⁶ Accordingly, in this case, glucosamine was applied with the aim of alleviating foot pain regardless of the patient's level of physical activity.

Finally, Collaplex granules contain a large amount of collagen. Collagen is a major structural component of articular cartilage, and its hydrolyzed form, collagen hydrolysate (CH), is known to exhibit high bioavailability. CH may also contribute to the maintenance of joint structure and the improvement of joint comfort by promoting collagen synthesis in joint matrix cells. In a clinical trial involving 250 patients with osteoarthritis, administration of CH for six months resulted in reduced pain scores and a statistically significant improvement in joint comfort.⁷ Based on these findings, collagen was prescribed in this case based on the judgment that it could contribute to pain relief and improved joint comfort during gait.

Through OCNT tailored to the patient's condition, the patient reported an overall improvement in health status, including a marked reduction in pain scores within a short period. However, as this is a single-patient case, there are limitations to applying the same approach to other patients presenting with foot pain. Nevertheless, this case is considered meaningful in that the patient's symptoms improved markedly within a short period and an improvement in quality of life was confirmed. This case is reported with the patient's consent.

References

1. Rao S, Riskowski JL, Hannan MT. Musculoskeletal conditions of the foot and ankle: assessments and treatment options. *Best Pract Res Clin Rheumatol.* 2012;26(3):345-68.
2. Dufour AB, Broe KE, Nguyen US, Gagnon DR, Hillstrom HJ, Walker AH, et al. Foot pain: is current or past footwear a factor? *Arthritis Rheum.* 2009;61(10):1352-8.
3. Otter SJ, Lucas K, Springett K, Moore A, Davies K, Cheek L, et al. Foot pain in rheumatoid arthritis prevalence, risk factors and management: an epidemiological study. *Clin Rheumatol.* 2010;29(3):255-71.
4. Saltzman CL, Brandser EA, Berbaum KS, DeGnore L, Holmes JR, Katcherian DA, et al. Reliability of standard foot radiographic measurements. *Foot Ankle Int.* 1994;15(12):661-5.
5. Debbi EM, Agar G, Fichman G, Ziv YB, Kardosh R, Halperin N, et al. Efficacy of methylsulfonylmethane supplementation on osteoarthritis of the knee: a randomized controlled study. *BMC Complement Altern Med.* 2011;11:50.
6. Giordano N, Fioravanti A, Papakostas P, Montella A, Giorgi G, Nuti R. The efficacy and tolerability of

glucosamine sulfate in the treatment of knee osteoarthritis: A randomized, double-blind, placebo-controlled trial. *Curr Ther Res Clin Exp.* 2009;70(3):185-96.

7. Benito-Ruiz P, Camacho-Zambrano MM, Carrillo-Arcentales JN, Mestanza-Peralta MA, Vallejo-Flores CA, Vargas-López SV, et al. A randomized controlled trial on the efficacy and safety of a food ingredient, collagen hydrolysate, for improving joint comfort. *Int J Food Sci Nutr.* 2009;60 Suppl 2:99-113.