CellMed
Orthocellular Medicine and Pharmaceutical Association

Case Report

세포교정영양요법 (OCNT)를 이용한 족저근막염 개선 사례

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A Case Report on Improvement with Plantar Fasciitis Using Ortho-Cellular Nutrition Therapy (OCNT)

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ABSTRACT
Objective: Examination of a case of improvement in plantar fasciitis using Ortho-Cellular Nutrition Therapy (OCNT).
Methods: A 37-year-old patient with plantar fasciitis was prescribed seven types of OCNT treatments, including Cyaplex.
Results: After four months of OCNT, the patient's plantar fasciitis showed improvement.
Conclusion: OCNT can alleviate pain caused by plantar fasciitis and enhance quality of life.

Keywords Ortho-Cellular Nutrition Therapy (OCNT), plantar fasciitis

INTRODUCTION

The plantar fascia consists of five thick, strong bands of fibrous tissue extending from the heel bone, known as the calcaneus, to the base of the toes on the bottom of the foot. It performs a crucial role in maintaining the foot arch and absorbing shock during walking, contributing to the foot's biomechanics. Plantar fasciitis occurs when repetitive micro-damages lead to collagen degeneration within the fascia and subsequent inflammation.[1] Plantar fasciitis is one of the most common musculoskeletal disorders of the foot, affecting an estimated 34.7% of the population.[2]

Known risk factors include excessive strain and chronic overload of the plantar fascia due to lifestyle or physical activity, with overweight individuals and athletes experiencing a higher likelihood of developing heel pain.[3] Structurally, a lower-than-normal foot arch, often called flat feet or a higher-than-normal arch, can increase the risk of developing plantar fasciitis.[4] The primary symptom is pain that originates in the inner bottom of the heel and extends towards the middle of the foot. This pain typically spreads from the inside of the heel to the center of the foot and varies in intensity based on activity levels.[5]

Plantar fasciitis is generally categorized into acute, subacute, and chronic stages (less than three months, three to six months, and over six months, respectively), with acute cases often healing naturally through stretching and rest. For subacute and chronic stages, non-pharmacological treatments like extracorporeal shock wave therapy or surgery are prioritized. Pharmacological treatments such as nonsteroidal anti-inflammatory drugs (NSAIDs), steroid anti-inflammatory drugs, and platelet-rich plasma injections are considered if symptoms do not improve.[6]

This study reports on a case of a man in his thirties who has been suffering from plantar fasciitis for two years to explore the potential of OCNT in treating plantar fasciitis, with the patient's consent.

CASE STUDY

1. Subject
A single case of a patient with plantar fasciitis was studied.
1) Name: Kim O (M/37 years)
2) Diagnosis: Plantar fasciitis
3) Onset date: September 2020
4) Treatment duration: September 2022 - January 2023 (approximately four months)
5) Main symptoms: Inner heel pain, fatigue
6) Medical history: Arrhythmia, hyperlipidemia
7) Social history: None
8) Family history: None
9) Current condition and medication: Arrhythmia (Concor 2.5 mg, Boryung Astrix capsule 100 mg), hyperlipidemia (Lipozet 10 mg)

2. Methods
Cyaplex X granule (101, twice daily, one sachet per dose)

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Received Apr 30, 2024; **Accepted** Apr 30, 2024; **Published** Apr 30, 2024
doi: http://dx.doi.org/10.5667/CellMed.spc.077

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

Eufaplex Alpha capsule (303, twice daily, three capsules per dose)
Tmplex capsule (101, twice daily, one sachet per dose)
Bioplex F (101, twice daily, one sachet per dose)
Sulfoplex PK tablet (404, twice daily, four tablets per dose)
Magplex capsule (202, twice daily, two capsules per dose)
Sulfoplex cream (010, once daily, applied moderate amount to the lesions)

RESULTS

One month after initiating Ortho-Cellular Nutrition Therapy (OCNT), improvements were observed in the patient's inner heel pain and foot fatigue, allowing for discontinuing hyperlipidemia and aspirin medications. Furthermore, by managing weight and diet, which are factors that exacerbate plantar fasciitis, the effectiveness of OCNT was enhanced. Ultimately, after four months of OCNT, there was a significant reduction in inner heel pain and foot fatigue, and considerable improvement in plantar fasciitis was achieved (Table 1).

DISCUSSION

Despite the high prevalence of plantar fasciitis, information on its etiology remains limited. Generally, the pathogenesis is more aligned with fasciosis (degenerative) rather than fasciitis (inflammatory), although research into the inflammatory aspects continues to develop.[7,8] The subject had been experiencing inner sole pain and severe fatigue since two years before OCNT administration. After, the patient was diagnosed with plantar fasciitis and treated with medications. However, symptoms worsened due to the intake of multiple drugs for arrhythmia and hyperlipidemia. Seven OCNT treatments, including Cyaplex X, were administered for this subject.

The chronic inflammation in plantar fasciitis is characterized by the dilation of blood vessels and increased capillary permeability, which facilitates the migration of neutrophils to the infected tissues. Within this response, inflammatory mediators (TGF-β, IL-1β, and IL-6) are secreted, leading to increased vascular permeability and immune tissue infiltration. The inflammatory cascade involving neutrophils moves monocytes to the injury site, where they differentiate into macrophages that release pro-inflammatory cytokines, perpetuating the inflammatory response. These processes continue, leading to secondary repair activities, including fibrosis and granuloma formation.[9,10]

Cyaplex and Sulfoplex contain aronia extract, known for its anthocyanin content—a flavonoid with diverse pharmacological activities including antioxidant, anti-inflammatory, anti-tumor, and neuroprotective effects.[11,12] Additionally, Eufaplex contains omega-3, which enhances immunity and has anti-inflammatory activity that has positively impacted the improvement of plantar fasciitis.[13] Furthermore, Tmplex, containing zinc and manganese, along with Bioplex, which includes sugars and fibers, has helped regulate blood circulation and ease inflammation.[8]

This case study focuses on a single patient and thus cannot be universally applied to all individuals with plantar fasciitis. However, the significant improvement observed through the administration of seven different OCNT treatments, including Cyaplex, substantiates the potential efficacy of this approach, which has been reported with the patient's consent.

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Table 1. Severity of Symptoms Experienced by the Patient During OCNT Treatment. The patient's discomfort increases from 1 to 5.

Symptom/Month	One month	Two months	Three months	Four months
Inner Heel Pain	5	4	3	1
Foot Fatigue	4	2	1	0
Weight Loss (kg)	2	2	1.5	1.5

0: No symptoms; 1: Symptoms are mild and hardly affect daily life; 2: Symptoms are more pronounced, requiring some adjustment in daily activities; 3: Symptoms significantly affect daily life, causing difficulty in performing some activities; 4: Symptoms greatly hinder activity during daily life; 5: Symptoms cause discomfort and severe stress in daily life.

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