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Case Report

세포교정영양요법(OCNT)을 이용한 수족냉증 개선 사례

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A Case of Improvement of Cold Extremities Using Ortho-Cellular Nutrition Therapy (OCNT)

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ABSTRACT
Objective: Case report on the improvement of symptoms in a patient with cold extremities using Ortho-Cellular Nutrition Therapy (OCNT).
Methods: A woman in her 70s, suffering from coldness and soreness in the lower limbs, associated with cramps and knee pain, was treated with OCNT.
Results: About three months after applying OCNT, the symptoms of coldness and soreness significantly improved, and the discomfort caused by the accompanying symptoms decreased.
Conclusion: OCNT can help improve symptoms for patients suffering from discomfort due to cold extremities.

Keywords Ortho-Cellular Nutrition Therapy (OCNT), cold extremities, cold sensation, blood circulation

Introduction

Cold extremities refer to a condition where one excessively feels cold in the hands or feet. Typically, this coldness is felt in cold temperature conditions, but it can also occur in non-cold settings. Patients with cold extremities tend to feel intense cold in their hands and feet compared to others and are more sensitive to cold environments. Usually, the feeling of coldness is limited to the hands or feet, but it can extend to the knees, lower back, or lower abdomen. Additionally, sensory abnormalities in the cold areas, joint pain, and in women, genital pain may also occur.[1]

The exact cause of cold extremities has not yet been established, but there are various suspected causes. One well-known cause is related to blood circulation. Typically, when the ambient temperature decreases, peripheral blood vessels should dilate, improving blood flow and returning the temperature of the body's extremities to normal. In the case of cold extremities, this blood flow is not smooth, leading to prolonged sensations of coldness.[2] A study in Japan measured peripheral blood flow in patients complaining of coldness in their hands and feet and found that blood flow was significantly lower than in patients without coldness.[3]

Another focus is hormonal changes. It is well known that cold extremities often occur in middle-aged women, who experience significant hormonal changes.[4] Sex hormones like estrogen and progesterone can be involved, which regulate body temperature in women.[5] Imbalances in these hormones can create an environment more conducive to the development of cold extremities and make the response to cold more sensitive. Other causes include a decrease in metabolic rate that can generate heat through muscle shivering, constitutional factors that may lower body temperature, and the patient's own chronic diseases.

For diagnosing cold extremities, infrared thermography to measure the temperature of the affected area, changes in heart rate, and cold stress tests are performed.[1] If diagnosed with cold extremities, the first step is to avoid cold environments and keep the affected areas warm. Additionally, vasodilators can be used to prevent the narrowing of blood vessels. If these treatments are ineffective, inserting a balloon catheter into the vessels to physically dilate them or surgical methods like chemical lumbar sympathectomy to reduce vasoconstriction can be considered.[6,7]

In this case, the patient experienced persistent, severe coldness in the feet and lower limbs, accompanied by cramps and joint pain. Thus, tailored Ortho-Cellular Nutrition Therapy (OCNT) was prescribed, and significant improvement in symptoms was observed. Therefore, this case is reported with the patient's consent.

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Case Study

1. Subject

A case study involving one patient with cold extremities.

1) Name: Sun OO (79/F)
2) Diagnosis: Cold extremities
3) Date of onset: 2014
4) Treatment duration: August 2020 to March 2021
5) Primary symptoms: Coldness in the lower extremities, soreness in feet, leg cramps, knee joint pain
6) Medical history: Gastrectomy, hysterectomy, liver cystectomy, carotid artery disease, monitoring a 9mm renal cyst, frequent sprains
7) Social history: None
8) Family history: None
9) Current medical conditions and medications: Hypertension, medications for joint pain, poor nutritional status

2. Methods

The OCNT prescribed to the patient is displayed in Table 1.

Table 1. OCNT prescription details for the patient.

Duration (Month) / Prescription Details	1	2 ~ 4	5 ~ 6
Cyaplex A granules	202	101	101
Eufaplex Alpha stick	101	101	101
Sulfoplex tablet	505	505	505
Calmaplex Granules	-	-	101

* 101: Twice a day, one packet/tablet each time in the morning and evening, 202: Twice a day, two packets/tablets each time in the morning and evening, 505: Twice a day, five packets/tablets each time in the morning and evening.

Results

On the third day of OCNT, swelling occurred at the site of a sprain from years ago, and symptoms of frequent urination (polyuria) appeared approximately every 10 minutes, but these symptoms disappeared from the sixth day onwards. Two months later, a petechial hemorrhage occurred above the ankle but disappeared within several days. Other healing reactions were observed, but most disappeared within a short period.

After three months of applying OCNT, there was a significant reduction in cold sensation and cramps in the lower extremities, and the soreness in the feet was also notably alleviated. The frequency of healing reactions almost vanished. The extent of symptoms experienced by the patient during OCNT is detailed in Table 2.

Discussion

The patient in this case study, a woman in her 70s, had long suffered from soreness and coldness in her lower extremities. Her symptoms were sufficiently severe to necessitate wearing socks to bed even during the height of summer and progressed to include leg cramps during episodes of increased physical activity. Additionally, she experienced peeling of the skin on the soles of her feet.

During the examination, the patient reported having undergone surgeries, including gastrectomy, hysterectomy, and liver cyst removal. Additionally, she was taking medications for carotid artery disease and hypertension and was under continuous monitoring for a kidney cyst. Chronic illnesses and multiple surgeries were thought to have caused nutritional and hormonal imbalances, impairing blood circulation and decreasing body function, which worsened her symptoms.

In conventional medicine, treatment for cold extremities typically involves prescribing drugs that dilate blood vessels to improve circulation, such as antihypertensives and vasodilators. However, from the perspective of traditional Chinese medicine, cold extremities are treated by addressing the coldness directly and restoring the body's balance to alleviate symptoms.[8] Despite being on antihypertensive medication, the patient had not seen improvement in her cold extremities. Therefore, the intervention followed the perspective of traditional Korean medicine, focusing on correcting bodily imbalances and providing high-quality nutrients through OCNT.

Cyaplex A contains a high concentration of polyphenols extracted from aronia. Specifically, proanthocyanidins significantly aid in antioxidant functions and can support antimicrobial activity. Notably, these components are recognized for having no toxicity or side effects compared to other substances or antibiotics.[9] Additionally, hibiscus is rich in plant-based estrogen, daidzein, known to help restore hormonal balance and reduce oxidative stress in the body.[10,11]

Omega-3, the main component of Eufaplex, helps improve blood circulation by enhancing endothelial function in blood vessels and relaxing smooth muscle cells. A study targeting the

Table 2. Degree of symptoms experienced by the patient during OCNT. The discomfort experienced by the patient increases from 0 to 5.

Duration (Month) / Symptoms	1	2	3	4	5	6
Coldness in lower extremities	5	4	3	2	1	0
Soreness in feet	5	4	3	2	1	0
Leg cramps	3	2	0	0	0	0
Knee joint pain	4	2	2	1	1	1

0: No symptoms and no impact on daily life, 1: Mild symptoms with almost no impact on daily life, 2: Clearer symptoms requiring some adaptation in daily activities, 3: Symptoms significantly impacting daily life and causing difficulty in performing some activities, 4: Symptoms causing major difficulties in daily activities, 5: Discomfort causing severe stress in daily life.

elderly population found that groups consuming omega-3 experienced smoother blood flow compared to the control group.[12] Therefore, the intake of these nutrients likely contributed to improving overall body balance and blood circulation, alleviating the patient's symptoms of coldness.

The patient, having suffered from the cold extremities for a long period, likely experienced effects on the bones and muscles in the areas where cold sensations were felt. Therefore, OCNT was implemented to help improve these symptoms.

Methylsulfonylmethane (MSM) is abundantly contained in Sulfoplex. This component is known for its anti-inflammatory and antioxidant properties and has been shown to inhibit apoptosis mediated by white blood cells by suppressing the markers like interleukin-6 (IL-6). Additionally, it is known to reduce cartilage degradation, which helps slow the progression of osteoarthritis.[13]

Calcium and magnesium are minerals vital for the structure and function of bones as well as essential for normal nerve and muscle activity. These elements must interact within the body at appropriate concentrations for normal nerve and muscle function. Additionally, vitamin D is crucial for aiding calcium absorption and promoting bone formation.[14] The patient's severe nutritional imbalance suggested a possible deficiency in these essential nutrients. Thus, Calmaplex, which contains all three nutrients, was administered to supplement her diet.

This case study was conducted on a single patient; therefore, it has limitations when applying the findings to all individuals with cold extremities. However, there was a significant improvement not only in the patient's sensations of cold in the limbs but also in frequently occurring symptoms like cramps and knee joint pain through the use of OCNT. These improvements were substantial enough to enhance the patient's quality of life. Therefore, this case is reported with the patient's consent.

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