

세포교정영양요법(OCNT)을 이용한 이상지질혈증 및 당뇨 개선 사례 연구

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A Case Study on the Improvement in Dyslipidemia and Diabetes Patient using Ortho-Cellular Nutrition Therapy (OCNT)

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ABSTRACT

Objective: Research on improving dyslipidemia and diabetes through Ortho-Cellular Nutrition Therapy (OCNT).**Methods:** OCNT was performed on a 77-year-old Korean woman with dyslipidemia and diabetes.**Results:** After OCNT, dyslipidemia and diabetes symptoms improved, and the medication could be discontinued or reduced.**Conclusion:** Applying OCNT can be helpful for patients suffering from dyslipidemia and diabetes symptoms.**Keywords** Ortho-Cellular Nutrition Therapy (OCNT), dyslipidemia, diabetes, drug side effects

INTRODUCTION

Diabetes is a condition in which blood sugar levels are high due to insufficient secretion of insulin or malfunctioning. Diabetes is typically classified into two categories: type 1 diabetes, characterized by difficulty in secreting insulin, and type 2 diabetes, which can secrete insulin but develops relative insulin resistance.¹

Type 1 diabetes is known to be caused by the destruction of beta cells that produce insulin due to immune factors. However, in the case of type 2 diabetes, studies have shown that genetic causes like family history, lifestyle habits including obesity or eating habits, and metabolic causes such as gestational diabetes, glucose levels, or insulin resistance play a complex role.² Additionally, research findings indicates that diabetes can develop as a side effect of steroid use.³

Dyslipidemia refers to high concentrations of low-density lipoprotein (LDL) cholesterol and triglycerides, or low concentrations of high-density lipoprotein (HDL) cholesterol in the plasma. In particular, a survey of dyslipidemia in the Korean population revealed that the prevalence of

hypercholesterolemia, a type of dyslipidemia, is gradually increasing. The main causes of this disease are usually a Westernized lifestyle and nutritional intake, and in women, physiological changes such as menopause. In particular, the prevalence rate of dyslipidemia is known to be higher in patients with diabetes or high blood pressure.⁴

To manage this, various drugs such as statins, resins, fibrates, niacin, and ezetimibe are used as treatments, and statins are the most widely used among these. Statins play a role in lowering LDL cholesterol levels in plasma and are also used to prevent cardiovascular disease. However, there are also have a side effect such as myopathy, rhabdomyolysis, and an increased risk of diabetes.^{5,6} Therefore, the importance of finding alternative ingredients or medications for statins depending on the patient is gradually increasing.

The patient in this case was suffering from diabetes and dyslipidemia, which were diagnosed during treatment for a chronic disease, but we would like to report a case in which these symptoms were improved through OCNT.

CASE REPORT

1. Subject

One case of a patient with dyslipidemia and diabetes was studied.

1) Name: Jang OO (F/77 years old)

2) Diagnosis: Dyslipidemia, diabetes

3) Date of onset: April 2022

4) Treatment period: April 2022 - Present

5) Main symptoms: None.

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6) Medical history: High blood pressure (diagnosed in February 2019), osteoporosis.
7) Social history: None.
8) Family history: Hypertension, diabetes, hyperlipidemia, gastritis, and lung cancer from younger brother.
9) Medications taken: Norvasc tablets 5mg, Alfocoline tablets, Zemiglo tablets 50mg, Ezet tablets 10mg, Telmican tablets 80mg, Diabex XR tablets 500mg, Cozaar tablets. As of May 2024, Glucophage XR tablets 500mg, Twynsta tablets 80/5mg.

2. Methods

The following OCNT has been applied since April 2022.

1. OCNT

Monacol Capsules (202, twice a day, 2 capsules per dose)
Vivarol capsules (111, three times a day, 1 capsule per dose)
Calmaplex Capsules (202, twice a day, 2 capsules per dose)
Diverol Capsule (010, once a day, 1 capsule per dose)

Three months after the first OCNT, the Monacol capsules were reduced to 101 (twice a day, 1 capsule per dose).

2. Diet

The patient was encouraged to eat more multigrain rice and vegetables and to reduce consumption of white rice, flour, and sugar. Also, combining walking therapy was suggested with the diet.

RESULTS

The progression of the disease and changes in drug prescriptions are shown in Table 1. After starting OCNT, she completely stopped taking Ezet tablets, a hyperlipidemia medication that she had briefly taken initially, based on her doctor's judgment that her dyslipidemia was well managed without it. Additionally, the two types of diabetes medication were reduced to one type. The glycated hemoglobin level for diagnosing diabetes was previously 7.0%, but after OCNT, it was adjusted to 6.6%, which is close to the control target of 6.5% for diabetic patients.

DISCUSSION

The case patient was a 77-year-old woman who had

suffered from high blood pressure in the past and was taking antihypertensive medication. Afterward, after receiving an injection suspected to be a steroid due to hair loss, diabetes developed as a side effect. At that time, a statin-based drug was prescribed. However, since she had already experienced side effects from steroids, she was advised to discontinue the use of statins due to concerns about potential side effects. After being diagnosed with hyperlipidemia, she took the prescribed ezetimibe medication for the first few days but stopped due to the side effects of heartburn. Therefore, we aimed to manage dyslipidemia while minimizing side effects through OCNT.

Monacolin K, the main ingredient of Monacol, is primarily found in red yeast rice. It is structurally identical to lovastatin and can help reduce blood cholesterol levels. It has also been shown to have effects similar to those of statins but with fewer side effects and better efficacy than simvastatin, one of the drugs used to treat dyslipidemia.⁷ In addition, alpha-linolenic acid and omega-3 fatty acids, which are abundant in Vivarol, have been shown in numerous studies to significantly lower total cholesterol levels and LDL cholesterol levels.⁸ In this case, the patient was able to smoothly manage dyslipidemia-related levels through OCNT without taking the prescribed dyslipidemia medication, and was ultimately able to discontinue the medication at the discretion of the attending physician.

In addition, the case patient was taking two types of diabetes-related prescriptions, Zemiglo tablets, and Diabex XR tablets. But after taking Zemiglo, she complained of heartburn and dizziness, so she discontinued the medication after 10 days. Therefore, OCNT was applied to manage diabetes after reducing the medication.

Vitamin D, the main ingredient in Diverol capsules, helps improve diabetes symptoms by lowering insulin resistance and promoting insulin secretion from the beta cells that produce insulin.⁹ According to a randomized controlled trial, the glycated hemoglobin level and HOMA-IR level, which indicates insulin resistance, were significantly reduced in the patient group taking vitamin D compared to the control group

Table 1. Diagnosis, course, and prescribed medications of case patients over time

	Diagnosis and Course	Prescribed Drugs
February 2019	Shows symptoms of high blood pressure and mild osteoporosis.	Norvasc tablets, Alfocoline tablets
February 2020	After receiving steroid injection treatment for hair loss Diagnosed with diabetes.	Norvasc tablets, Alfocoline tablets, Diabex XR tablets 500 mg, Zemiglo tablets 50 mg, Livaro tablets*
December 2021	Dyslipidemia (hyperlipidemia) was additionally diagnosed.	Norvasc tablets, Alfocoline tablets, Ezet tablets 10mg, Coza tablets, Diabex XR sustained-release tablets 500 mg, Zemiglo tablets 50 mg
April 2022	OCNT was prescribed.	Norvasc tablets, Alfocoline tablets, Ezet tablets 10 mg, Telmican tablets 80 mg, Diabex XR sustained-release tablets 500 mg, Zemiglo tablets 50 mg
July 2022	She received an opinion from her doctor that her dyslipidemia was being managed well, but the prescription was maintained.	Norvasc tablets, Alfocoline tablets, Ezet tablets 10 mg, Telmican tablets 80 mg, Diabex XR sustained-release tablets 500 mg, Zemiglo tablets 50 mg
Current	She received an opinion from her doctor that her dyslipidemia is being managed well. The glycated hemoglobin level also decreased from 7.0 (mmol/mol) to 6.6, and one tablet of hyperlipidemia medication (Ezet Tablet) and one tablet of diabetes medication (Zemiglo Tablet) was reduced.	Glucophage XR tablet 500 mg, Twynsta 80/5 mg

* Additional prescriptions received since December 2020.

taking placebo.¹⁰ Additionally, the calcium contained in Calmaplex regulates insulin responsiveness within cells and helps facilitate smooth insulin action.¹¹ It is believed that these ingredients included in OCNT minimize the side effects experienced by patients, allowing them to smoothly manage diabetes symptoms and reduce glycated hemoglobin levels even when diabetes-related drugs are reduced.

This case is an example of OCNT applied to a single patient, so it is difficult to apply it universally to all dyslipidemia and diabetes patients. However, it is considered significant that the OCNT prescription tailored to the patient minimizes the side effects experienced by the patient, successfully improves dyslipidemia and diabetes symptoms and related values, and makes it possible to reduce the number of medications taken. Therefore, we report this with the patient's consent.

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