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Case Report

세포교정영양요법(OCNT)을 이용한 고지혈증 개선 사례

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A Case Study on the Improvement of Hyperlipidemia Using Ortho-Cellular Nutrition Therapy (OCNT)

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ABSTRACT
Objective: To report a case of hyperlipidemia improvement through Ortho-Cellular Nutrition Therapy (OCNT).
Methods: OCNT was applied to a 68-year-old Korean male diagnosed with hyperlipidemia, and changes in blood lipid concentrations were observed through blood tests.
Results: After OCNT administration, LDL cholesterol levels and total cholesterol and triglyceride levels decreased.
Conclusion: OCNT application can help control cholesterol in hyperlipidemia patients experiencing statin side effects.

Keywords Ortho-Cellular Nutrition Therapy (OCNT), hyperlipidemia, triglycerides, blood cholesterol, statins

Introduction

Hyperlipidemia refers to an excessive increase in cholesterol and triglycerides in the blood. Various lipids in the blood usually exist in the form of lipoproteins combined with proteins. Cholesterol is transported through the blood bound to lipoproteins and is classified as very-low-density lipoprotein (VLDL), low-density lipoprotein (LDL), and high-density lipoprotein (HDL) depending on the type of lipoprotein.

LDL cholesterol is commonly known as 'bad cholesterol'. When its levels increase, the risk of atherosclerosis and cardiovascular diseases rises, making it a primary target for management in hyperlipidemia treatment. On the other hand, HDL cholesterol is known as 'good cholesterol' and is believed to remove cholesterol from the blood.

Dyslipidemia is a similar concept to hyperlipidemia, referring not only to high cholesterol or triglyceride levels but also to cases where HDL cholesterol levels are low.

Hyperlipidemia can be diagnosed with a simple blood test. However, since lipid levels can fluctuate depending on meals, testing should be conducted in a fasting state for accurate measurement. Average total cholesterol levels are defined as less than 200 mg/dL and triglyceride levels as less than 150 mg/dL. For LDL cholesterol, defined as bad cholesterol, patients with cardiovascular disease or equivalent risk should consider lifestyle improvements and drug treatment if it exceeds 130 mg/dL.

In this case, the patient was diagnosed with hyperlipidemia in 2021. He was prescribed rosuvastatin and took it for a year, which was effective in controlling total cholesterol and triglycerides. However, while his LDL cholesterol concentration remained in the risk group, side effects from long-term statin use occurred, and there was no improvement. OCNT was applied to this patient to control blood lipid concentrations, and this report aims to describe the subsequent progress.

Case Report

1. Subject
One case of a hyperlipidemia patient was studied.

1) Name: Kim OO (68 years old/M)
2) Diagnosis: Hypertension, Hyperlipidemia
3) Onset: Hypertension (2009)
Hyperlipidemia (2021)
4) Treatment period: June 2022 - present
5) Chief complaint: Muscle weakness, memory decline, headache, fatigue after statin use
6) Past history: Hypertension

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7) Social history: No smoking, alcohol consumption three to five times a week
8) Family history: None
9) Present illness and current medications: Twynsta tablet (40/5 mg, once daily), Crow tablet (Rosuvastatin 5 mg, long-term use for one year), Hanmi Tams (0.4 mg) and Curoid (5 mg) for prostatic hyperplasia treatment

2. Method
OCNT was conducted as follows:
Monacol (002, once daily, two tablets per dose)

Results

The subject of this case study was a 68-year-old male who had been diagnosed with hypertension and hyperlipidemia in the past and was taking prescribed medications. The patient was taking rosuvastatin for hyperlipidemia treatment, which inhibits cholesterol synthesis by blocking HMG-CoA reductase, which is necessary for cholesterol synthesis, thereby suppressing mevalonic acid production.[1] However, when taking rosuvastatin, about 1-10% of patients experience headaches and asthenia, and side effects such as muscle weakness and memory decline may occur in severe cases. However, there is no clear evidence for this. Nevertheless, rosuvastatin is more effective in improving blood lipid concentrations than other statin-class drugs.[2]

The patient had been taking rosuvastatin for about a year, but due to frequent drinking habits, his triglyceride concentration was nearly twice the average level. As the side effects experienced by the patient were severe, rosuvastatin administration was discontinued, and OCNT was used to control blood lipid concentrations.

After consistent OCNT administration, the patient's blood lipid concentrations improved. Total cholesterol concentration decreased from 197 mg/dL to 167 mg/dL, and triglyceride concentration decreased from 93 mg/dL to 63 mg/dL. Additionally, LDL cholesterol decreased from 126 mg/dL to 90 mg/dL. (Fig. 1.)

Discussion

While cholesterol is essential for maintaining life, oxidized cholesterol can cause cell toxicity, atherosclerosis, and mutations.[3] Particularly, hyperlipidemia, which occurs due to decreased antioxidant detoxification capacity, is a metabolic syndrome that causes atherosclerosis by oxidized cholesterol. From a modern medical perspective, using cholesterol synthesis inhibitors (statins) are the standard treatment. However, some long-term statin users report muscle pain, memory decline, increased glycated hemoglobin, and chronic fatigue.[4-6] Therefore, a new treatment for hyperlipidemia that is safe from these side effects is needed.

Monacolin K, the main ingredient in Monacol, is mainly found in red yeast rice and is structurally identical to lovastatin, which can help reduce blood cholesterol levels. Monacolin K functions by inhibiting HMG-CoA reductase, the liver's primary enzyme responsible for cholesterol synthesis. Inhibition of this enzyme can help reduce blood LDL cholesterol, effectively treating hypercholesterolemia.[7,8] It also shows similar effects to statins but with almost no side effects and is more effective than simvastatin, one of the drugs used to treat dyslipidemia.[9]

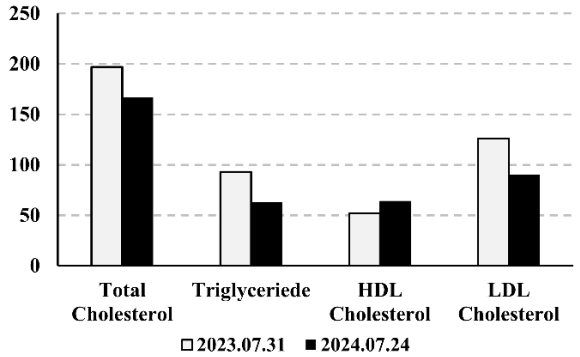

Fig 1. Changes in the patient's blood lipid concentrations after OCNT administration.
Total cholesterol (Before: 197 mg/dL, After: 167 mg/dL) / Triglycerides (Before: 93 mg/dL, After: 63 mg/dL) / HDL cholesterol (Before: 52 mg/dL, After: 64 mg/dL) / LDL cholesterol (Before: 126 mg/dL, After: 90 mg/dL)

According to research, the frequency of alcohol consumption has a significant correlation with the increase in triglycerides and total cholesterol, and patients with high glycated hemoglobin levels are at risk of increased LDL cholesterol and triglyceride levels.[10,11] After consistent consumption of red yeast rice extract for 12 weeks, a decrease in fasting blood glucose was observed compared to the placebo group. From this perspective, Monacol may have contributed to restoring the patient's glycated hemoglobin to normal range and reducing LDL cholesterol.[12]

To date, the patient continues to make efforts to maintain optimal blood lipid levels and has not experienced any side effects during OCNT. While this case report is a single case and cannot be universally applied to all hyperlipidemia patients, it suggests that Monacol has the potential to replace synthetic statins and has the effect of reducing LDL cholesterol levels while improving total cholesterol and triglyceride levels. With the patient's consent, this case is being reported.

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