

세포교정영양요법(OCNT)을 이용한 고지혈증 개선 사례 연구

강선희 약사

제주시 한경면 두신로75 신창약국

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

Pharmacist, Sunhee Kang

Sinchang Pharmacy, 75, Dushin-ro, Hankyung-myeon, Jeju-si, Republic of Korea

ABSTRACT

Objective: A case report on the Improvement of Hyperlipidemia Patients Using Ortho-Cellular Nutrition Therapy (OCNT).

Methods: A Korean woman in her 50s was diagnosed with hyperlipidemia, and she has had a very high level of LDL-cholesterol.

Results: After performing OCNT, the LDL-cholesterol level decreased from 208 mg/dL to 109 mg/dL.

Conclusion: The application of OCNT to patients with hyperlipidemia can help reduce their LDL-cholesterol levels and relieve symptoms.

Keywords: Ortho-Cellular Nutrition Therapy (OCNT), hyperlipidemia, LDL-Cholesterol

Introduction

Hyperlipidemia is observed when an excess amount of fat is present in the blood and accumulates on the walls of blood vessels, causing inflammation. As a result, the incidence of cardiovascular disease continues to increase. Fats in the blood are classified into total cholesterol, triglycerides, LDL cholesterol, and HDL

cholesterol. When such cholesterol is abnormally high in the blood, plaque accumulates on the walls of blood vessels and causes arteriosclerosis, which narrows the blood vessels.¹ Cholesterol serves important functions such as cell membrane composition and hormone synthesis, but it can cause arteriosclerosis, and it can cause stroke, angina pectoris, and myocardial infarction depending on the site of occurrence. Therefore, it must be maintained at an appropriate level.^{2,3} Symptoms of hyperlipidemia are not usually observed, but symptoms associated with it may be observed when relevant complications occur. In particular, it is reported that the prognosis for cardiovascular disease is not very good. In fact, when cholesterol levels decrease by 1%, the incidence of cardiovascular disease also decreases by

*Correspondence: Sunhee Kang

E-mail: aziazzi@naver.com

Received Jul 27, 2023; Accepted Jul 28, 2023; Published Jul 31, 2023

doi: <http://dx.doi.org/10.5667/CellMed.sp.033>

©2023 by CellMed Orthocellular Medicine Pharmaceutical Association

This is an open-access article under the CC BY-NC license.

(<http://creativecommons.org/licenses/by-nc/3.0/>)

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

2%, indicating a direct correlation between the two.⁴ Patients with hyperlipidemia often experience such a disease due to an increase in specific lipids in the blood brought about by genetic factors, however, hyperlipidemia may also be caused by other causes including obesity, alcohol, or diabetes. Treatment of hyperlipidemia commonly uses the method of drug therapy that inhibits cholesterol synthesis as well as lifestyle enhancement through diet control and exercise to maintain an appropriate weight for health. Therefore, such a disease can be prevented by maintaining an appropriate weight, controlling diet, and performing exercises to avoid becoming obese in advance.

The patient of this case was a 50-year-old woman who was diagnosed with hyperlipidemia in December 2022 and was under a statins prescription. It has been determined that there was no influence of genetic factors or alcohol, and it aims to report the progress of OCNT performed to help improve blood cholesterol levels.

Cases

1. Target

It targeted one patient with hyperlipidemia.

- 1) Name: O O O (F/50 years old)
- 2) Diagnosis: Hyperlipidemia
- 3) Date of Onset: December 04, 2022
- 4) Treatment Period: December 04, 2022 - current (ongoing)
- 5) Chief Complaint: Hyperlipidemia
- 6) Past History: None
- 7) Social History: None
- 8) Family History: None
- 9) Current Medical History and Drug Administration: Crestor Tab. 10 mg (discontinued after taking it once a day for 1 month)

2. Method

The OCNT was applied in accordance with the following method.

Monacol (002, once a day, 2 tablets per administration)
Eufaplex Alpha (002, once a day, 2 tablets per administration)

The application was performed as specified above, and Crestor was also administered during the first month.

Result

The patient, in this case, was a 50-year-old female diagnosed with hyperlipidemia in December 2022. At the time, the patient's LDL-cholesterol level was 208 mg/dL, indicating inclusion in the high-risk group, and there was a risk of atherosclerosis (deposition of cholesterol) if no further action was taken for treatment. A blood sample was taken 1 month after application of the first OCNT, and the LDL-cholesterol level showed a significant decrease to 129 mg/dL. OCNT was applied in the same way, and it was confirmed that the level recovered to normal at a decrease from 208 mg/dL to 109 mg/dL in May 2023 when compared to values prior to performing OCNT (Fig. 1).

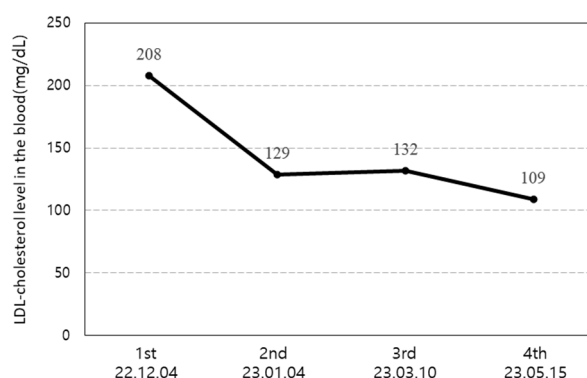


Fig. 1. Changes in blood concentration of LDL-cholesterol after OCNT.

Table 1. Changes in blood concentration of cholesterol after OCNT.

Blood cholesterol (mg/dL)	1st Dec. 04, 2022	2nd Jan. 04, 2023	3rd Mar. 10, 2023	4th 23.05.15	Remarks
LDL-cholesterol	208	129	132	109	
HDL-cholesterol	64	62	56	53	
Triglycerides	113	87	103	101	

Consideration

Cholesterol is a substance re-synthesized in the liver to utilize absorbed fat in the body, and it is also a constituent of the cell membrane of biological cells and serves as the basic raw material for various hormones in the body. Therefore, this constituent must always be present in an appropriate amount in the human body. The patient in this case was diagnosed with hyperlipidemia and relevant values required rapid improvement due to a very high LDL-cholesterol level of 208 mg/dL. Monacolin K, one of the key constituents of Monacol, has the same chemical structure as Lovastatin. Lovastatin lowers cholesterol biosynthesis by regulating the activity of 3-hydroxy-3-methylglutaryl-coenzyme A reductase. It has been reported that LDL-cholesterol levels decreased when lovastatin was taken in healthy adults.⁵ It was also confirmed that the risk of cardiovascular disease was reduced when lovastatin was administered to 6,500 people in a study.⁶ The red koji contained in Monacol has the function of controlling cholesterol levels and it has been reported that in 79 patients who consumed red koji (600 mg) for 8 weeks (LDL-cholesterol level 203.9 mg/dL), their LDL-cholesterol level was reduced by an average of 27.7%.⁷ As such, it is reasonable to state that Monacolin K helped to improve the LDL-cholesterol level in patients. Since cholesterol must be maintained at a certain level in the body, cholesterol esterification exists as one of the methods to maintain homeostasis in a body. This is a

method of transporting or storing cholesterol produced through diet or biosynthesis by combining it with fatty acids. Linoleic acid contained in Eufaplex Alpha is used for the biosynthesis of prostaglandin E (PGE₁ and PGE₂ exist). As an essential drug included in the WHO Model List of Essential Medicines, PGE plays an important role in regulating the body temperature of a human and exhibits various functions, including vasoconstriction and vasodilation, regulation of platelets and leukocytes, stimulation of fever, and childbirth. It has been reported that PGE also plays a role in cholesterol control, and in-vivo experiments have shown that it prevents excessive accumulation of LDL-cholesterol through cholesterol esterification.⁸ Therefore, supplying appropriate fatty acids through Eufaplex Alpha to the patient's excessive LDL-cholesterol promotes the biosynthesis of PGE, indicating its potential function in improving LDL-cholesterol levels in the blood.

This case was performed in accordance with a single-patient case, so it is difficult to apply such a study to most patients, and it seems that there are clearly limitations in interpreting the results of this study. However, based on consent acquired by the patient, this report proposed that the LDL-cholesterol level improved from 208 mg/dL to 129 mg/dL in a relatively short period of time in a patient diagnosed with hyperlipidemia, and the level continued to improve even after some time.

References

- 1 Hall, J. E. & Hall, M. E. *Guyton and Hall textbook of medical physiology e-Book*. (Elsevier Health Sciences, 2020).
- 2 Bloch, K. in *New comprehensive biochemistry* Vol. 20 363-381 (Elsevier, 1991).
- 3 Hu, J., Zhang, Z., Shen, W.-J., Azhar, S. J. N. & metabolism. Cellular cholesterol delivery, intracellular processing and utilization for biosynthesis of steroid hormones. *7*, 1-25 (2010).
- 4 Jain, K. S., Kathiravan, M. K., Somani, R. S. & Shishoo, C. J. The biology and chemistry of hyperlipidemia. *Bioorg Med Chem* **15**, 4674-4699, doi:10.1016/j.bmc.2007.04.031 (2007).
- 5 Krukemyer, J. J., Talbert, R. L. J. P. T. J. o. H. P. & Therapy, D. Lovastatin: A new cholesterol-lowering agent. *7*, 198-209 (1987).
- 6 Downs, J. *et al.* for the Air Force/Texas Coronary Atherosclerosis Prevention Study. Primary prevention of acute coronary events with lovastatin in men and women with average cholesterol levels: results of AFCAPS/TexCAPS. **279**, 1615-1622 (1998).
- 7 Lin, C.-C., Li, T.-C. & Lai, M.-M. J. E. J. o. E. Efficacy and safety of *Monascus purpureus* Went rice in subjects with hyperlipidemia. **153**, 679-686 (2005).
- 8 Bergelson, L. D. J. L. The interaction of prostaglandin E1 with serum lipoproteins possible role in cholesterol homeostasis. **25**, 767-774 (1990).