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세포교정영양요법(OCNT)을 이용한 고지혈증 개선 사례

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A Case of improvement of hyperlipidemia using Ortho-Cellular Nutrition Therapy (OCNT)

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ABSTRACT
Objective: A Case of improvement of hyperlipidemia through the use of OCNT.
Methods: A Korean female in her 40s has been suffering from a wide range of symptoms due to hyperlipidemia.
Results: Hyperlipidemia was improved following implementation of OCNT.
Conclusion: Application of OCNT on hyperlipidemia can be helpful in alleviation of symptoms.

Keywords Ortho-Cellular Nutrition Therapy (OCNT), hyperlipidemia, fatigue and lethargy

Introduction

Hyperlipidemia refers to an increase in lipids in blood vessels, which include fats, fatty acids, cholesterol, cholesteryl esters, phospholipids and triglycerides, etc. In 1984, the association between serum cholesterol levels and the risk of coronary heart disease (CHD) was first reported. Hyperlipidemia is a major cause of atherosclerosis, and relevant disorders include ischemic cerebrovascular disease, peripheral vascular disease and coronary artery disease. Worldwide, CHD is the leading cause of death, accounting for twice as many deaths as cancer and 10 times as many deaths from common accidents, making it a very important disease that needs to be managed due to its high mortality rate.[1] Statins and cholesterol absorption inhibitors are the main drugs used worldwide to prevent hyperlipidemia and atherosclerosis. However, these drugs have the potential to cause several side effects. Statins can cause side effects such as muscle pain, liver damage and increased blood sugar. Among these side effects, rhabdomyolysis is considered the most fatal side effect. It is caused by skeletal muscle damage that destroys the integrity of the muscle, and releases muscle components such as creatine kinase (CK), myoglobin, lactate dehydrogenase, aldolase and electrolytes into the bloodstream.[2]

For such reasons, the female patient in this case wanted to improve her hyperlipidemia only through implementation of OCNT without statins. As the result, after about three months, her blood low-density cholesterol (LDL) levels decreased. This suggests that application of OCNT to patients with hyperlipidemia could be beneficial for treatment or alleviation of symptom in hyperlipidemia patients.

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Case

1. Subject
1 case of hyperlipidemia was used as the subject of this study.
1) Name: Oh, ○ ○ (F/40 years old)
2) Name of diagnosis: hyperlipidemia
3) Manifestation date: October 19, 2023
4) Treatment period: 23.10.19 ~ Present
5) Main symptoms: hyperlipidemia, fatigue, lethargy
6) Past medical history: None
7) Past social history: None
8) Past family history: hyperlipidemia
9) Current medical condition and medicine administered: None

2. Method
Cyaplex Granule (100, once a day, 1 sachet at a time)
Eufaplex Alpha (303, 2 times a day, 3 capsules at a time)
Tmplex Capsule (101, 2 times a day, 1 capsule at a time)
Monacol Capsule (101, 2 times a day, 1 capsule at a time)
The patient was advised to take other detoxification measures included cutting down on meat, coffee, and having a vegetarian diet, particularly seaweed soup.

Results

The patient was diagnosed with hyperlipidemia on October 19, 2023. OCNT was implemented from the date of the diagnosis and, 3 months later, the fatigue and lethargy disappeared, and

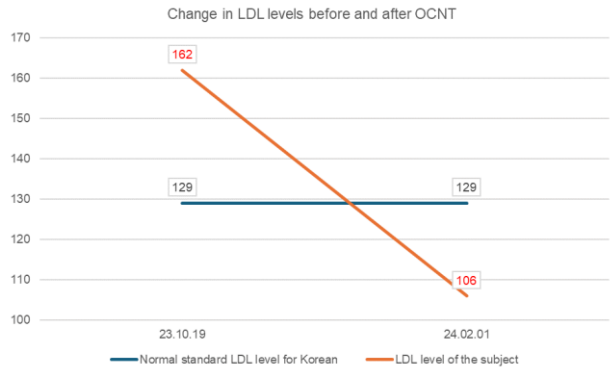

Figure 1. Change in LDL levels before and after OCNT.

the LDL level dropped to the normal range, which resulted in the diagnosed that she is no longer hyperlipidemia.

Considerations

The patient is a 40-year-old female who was diagnosed with hyperlipidemia on October 19, 2023. At that time, she had blood high-density cholesterol (HDL) level of 66.8 mg/dL, triglycerides (TG) level of 68 mg/dL, low density cholesterol (LDL) level of 162 mg/dL and total cholesterol level of 243 mg/dL Accordingly, she was diagnosed with hyperlipidemia and prescribed 2 mg of Pitavastatin at the corresponding hospital. However, given the side effects of statin drugs, she decided to start OCNT to improve her hyperlipidemia.

Administration of Monacol was initially started with 202 (2 capsules at a time 2 times a day), but was adjusted to 101 (1 capsule at a time twice a day) due to swelling and lack of strength in her body. This change in the contents of OCNT was made due to the decision that discharge of lipid would be difficult given her poor detoxification capability of the liver.

Cyaplex X Granule contain anthocyanins, which can reduce serum oxidized-LDL concentrations and oxidized-LDL uptake, thereby inhibiting the formation of foam cells (cell formed due to deformation of macrophages that have taken up excess cholesterol within the blood vessel wall).[3]

In addition, it has also been suggested that anthocyanins may modulate LDL-C through inhibition of cholesteryl ester transfer protein (CEPT), which is a plasma protein that mediates the removal of cholesteryl esters from HDL and their exchange with TG molecules derived primarily from LDL, VLDL or chylomicrons.[4,5]

Since hypothyroidism is sometimes associated with hyperlipidemia,[6] zinc[7], selenium[8], copper[9] and manganese[10] that play essential role in regulating the synthesis, metabolism and function of thyroid hormones were supplemented with administration of Tmplex Capsule. In addition, the micronutrients in Tmplex is helpful in eliminating toxic metals by absorbing and excreting them.[11]

The alpha-linolenic acid contained in Eufaplex Alpha appears to improve blood lipid profiles by reducing not only the levels of triglycerides, total cholesterol and LDL but also VLDL-C, and, further, appears to reduce risk of cardiovascular diseases by inhibiting vascular inflammation and endothelial activation.[12,13]

Moreover, Monacolin k contained in Monacol Capsule acts by inhibiting HMG-CoA reductase, the main enzyme responsible for cholesterol synthesis in the liver. Inhibition of this enzyme induces a decrease in LDL levels in the blood, which is effective in treating hypercholesterolemia.[14,15]

On February 1, about three months after having started OCNT, her LDL level decreased from 162 mg/dL to 106 mg/dL and she was diagnosed as not having hyperlipidemia at the hospital.

This is likely a result of the detoxification of toxic metals by Tmplex Capsule and the cholesterol-lowering effects of Eufaplex and Monacol. Although Monacol is a statin-type compound, it played the role of safety reducing cholesterol without displaying side effects since it is a naturally occurring compound.

Through this case, it was demonstrated that OCNT has the potential to be a viable alternative to allopathic therapy for hyperlipidemia, and, given the positive outcome in this patient without any side effects until now, it would be necessary to collect greater number of cases of this application. The patient has since reduced her Monacol dose to one tablet per day to maintain her current cholesterol level.

This case report is anecdotal and may not be universally applicable to all patients with hyperlipidemia. However, it is reported with the consent of the patient because of the significant improvement achieved following the implementation of OCNT.

References

1 Jain, K. S., Kathiravan, M. K., Somani, R. S. & Shishoo, C. J. The biology and chemistry of hyperlipidemia. *Bioorg Med Chem* **15**, 4674-4699 (2007).

2 Stroes, E. S. *et al.* Statin-associated muscle symptoms: impact on statin therapy—European Atherosclerosis Society Consensus Panel Statement on Assessment, Aetiology and Management. *European Heart Journal* **36**, 1012-1022 (2015).

3 Garcia, C. & Blesso, C. N. Antioxidant properties of anthocyanins and their mechanism of action in atherosclerosis. *Free Radical Biology and Medicine* **172**, 152-166 (2021).

4 Liu, C., Sun, J., Lu, Y. & Bo, Y. Effects of anthocyanin on serum lipids in dyslipidemia patients: a systematic review and meta-analysis. *PLoS One* **11**, e0162089 (2016).

5 Qin, Y. *et al.* Anthocyanin supplementation improves serum LDL- and HDL-cholesterol concentrations associated with the inhibition of cholesteryl ester transfer protein in dyslipidemic subjects¹²³. *The American Journal of Clinical Nutrition* **90**, 485-492 (2009).

6 Su, X., Peng, H., Chen, X., Wu, X. & Wang, B. Hyperlipidemia and hypothyroidism. *Clin Chim Acta* **527**, 61-70 (2022).

7 Severo, J. S. *et al.* The role of zinc in thyroid hormones metabolism. *International Journal for Vitamin and Nutrition Research* (2019).

8 Köhrle, J. & Gärtner, R. Selenium and thyroid. *Best practice & research Clinical endocrinology & metabolism* **23**, 815-827 (2009).

9 Jain, R. B. Thyroid function and serum copper, selenium, and zinc in general US population. *Biological trace element research* **159**, 87-98 (2014).

10 Obsekov, V., Ghassabian, A., Mukhopadhyay, S. & Trasande, L. Manganese and thyroid function in the national health and nutrition examination survey, 2011–2012. *Environmental Research* **222**, 115371 (2023).

11 Peraza, M. A., Ayala-Fierro, F., Barber, D. S., Casarez, E. & Rael, L. T. Effects of micronutrients on metal toxicity. *Environmental Health Perspectives* **106**, 203-216 (1998).

12 Yue, H. *et al.* Effects of α-linolenic acid intake on blood lipid profiles： a systematic review and meta-analysis of randomized controlled trials. *Critical Reviews in Food Science and Nutrition* **61**, 2894-2910 (2021).

13 Zhao, G. *et al.* Dietary α-linolenic acid reduces inflammatory and lipid cardiovascular risk factors in hypercholesterolemic men and women. *The Journal of nutrition* **134**, 2991-2997 (2004).

14 Xiong, Z. *et al.* An overview of the bioactivity of monacolin K / lovastatin. *Food and Chemical Toxicology* **131**, 110585 (2019).

15 Zhang, Y. *et al.* An overview on the biosynthesis and metabolic regulation of monacolin K/lovastatin. *Food & function* **11**, 5738-5748 (2020).