

## 세포교정영양요법(OCNT)을 이용한 만성 림프구성 백혈병 개선 사례

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### A Case Study on Improving Chronic Lymphocytic Leukemia Using Ortho-Cellular Nutrition Therapy (OCNT)

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#### ABSTRACT

**Objective:** Report of a case study on the improvement of chronic lymphocytic leukemia through Ortho-Cellular Nutrition Therapy (OCNT).

**Methods:** OCNT was administered to a Korean woman in her forties suffering from various symptoms due to chronic lymphocytic leukemia.

**Results:** After administering OCNT, there was a significant improvement in symptoms such as lymph node enlargement, fatigue, and edema caused by chronic lymphocytic leukemia.

**Conclusion:** The application of OCNT in chronic lymphocytic leukemia can help alleviate symptoms.

**Keywords:** Ortho-Cellular Nutrition Therapy (OCNT), chronic lymphocytic leukemia, white blood cell count, edema

#### Introduction

Chronic lymphocytic leukemia is a disease characterized by the persistent accumulation of CD5+ B lymphocytes in peripheral blood, bone marrow, and secondary lymphoid organs (lymph nodes and spleen).<sup>1</sup>

In comparison with Western countries, chronic lymphocytic leukemia is rarer in Asians and shows different clinical characteristics. Korean patients exhibited higher expression of surface membrane immunoglobulin (Smlg) lambda and atypical CD22 and FMC7 markers compared to Western patients.<sup>2</sup> In Korea, the incidence rate is 0.11 per 100,000 people, with approximately 56 new cases diagnosed each year.<sup>3</sup>

The staging of chronic lymphocytic leukemia was developed by Kanti Rai in 1975, and the stages are described in Table 1.<sup>4</sup>

The most commonly used primary treatment for chronic lymphocytic leukemia is the FCR regimen, which combines fludarabine, cyclophosphamide, and rituximab. Following this, the GC regimen that combines obinutuzumab and chlorambucil is also used. The average progression-free survival rate (the

**Table 1. Staging Characteristics of Chronic Lymphocytic Leukemia.**

Stage	Features
Stage 0	Increased white blood cell count, elevated red blood cell and platelet counts
Stage 1	Increased white blood cell count, normal red blood cell and platelet counts, lymph node enlargement
Stage 2	Increased white blood cell count, normal red blood cell and platelet counts, lymph node and spleen or liver enlargement
Stage 3	Increased white blood cell count, decreased red blood cell count, normal platelet count, lymph node and spleen or liver enlargement
Stage 4	Increased white blood cell count, low or nearly normal red blood cell count, low platelet count, lymph node and spleen or liver enlargement

period during which the disease does not worsen and the patient survives) for patients receiving FCR and GC regimens was  $86.6 \pm 3.7\%$  and  $89.8 \pm 6.9\%$ , respectively.<sup>5</sup>

This case report presents a significant improvement in a patient with chronic lymphocytic leukemia after OCNT, with consent obtained from the patients for the case report.

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## Case Study

### 1. Subject

A single case of a chronic lymphocytic leukemia patient was studied.

- 1) Name: Hwang O (F/48)
- 2) Diagnosis: Chronic Lymphocytic Leukemia
- 3) Date of Onset: June 2018
- 4) Treatment Duration: April 2023 to present
- 5) Primary Symptoms: Fatigue, loss of appetite, anemia, abnormally high white blood cell count, edema, tingling in the toes, sensory abnormalities, enlargement of lymph nodes in the neck, groin, and under the breasts
- 6) Medical History: Prediabetes, slightly elevated cholesterol levels
- 7) Social History: Stress
- 8) Family History: Father has diabetes
- 9) Medications and Treatments Applied: Currently taking Feroba-You tablets (Hospital prescription)

### 2. Methods

The OCNT treatment administered to the patient is shown in Table 2.

## Results

The patient in this case experienced severe fatigue in June 2018 and developed multiple lymph node nodules on various parts of her body, prompting her to seek examination at a local hospital. However, she was advised by the hospital to receive a diagnosis at a higher-tier comprehensive hospital, where she was later diagnosed with Stage 3 chronic lymphocytic leukemia after a bone marrow test.

Subsequently, she was monitored every three to six months and was prescribed Feroba-You tablets (medication for anemia) to address her low anemia levels. Due to constipation, a side effect of the medication, she adjusted her intake to once every two or three days.

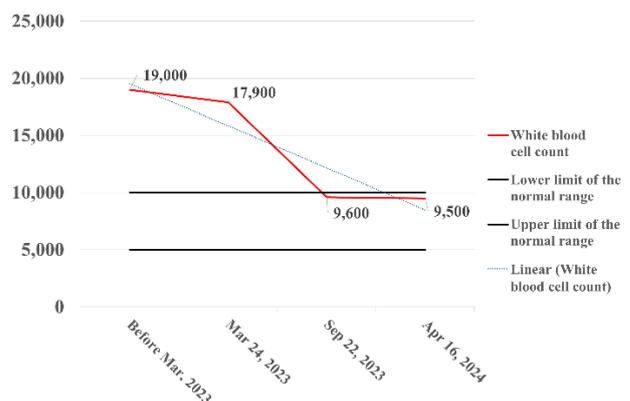
In April 2023, during a pharmacy visit for appetite loss and

weight decrease, the patient appeared pale and ill, prompting the recommendation of Vivagin X and Selenplex capsules. Ten days later, it was confirmed that she had been taking them once every two or three days; she was advised to consistently take them twice daily.

On September 22, 2023, during OCNT, a test at the comprehensive hospital confirmed that her white blood cell count, which had not dropped since her 2018 diagnosis, had returned to normal levels. (Fig. 1.)

Before implementing OCNT, the patient experienced significant enlargement and nodulation of lymph nodes in the neck, armpits, and groin areas. After starting OCNT, these symptoms nearly disappeared. According to the patient, the lymph nodes on both sides of the neck resembled clusters of grapes due to the numerous nodules, and similar symptoms were present under the arms, breasts, and groin. In the summer, the enlarged cervical lymph node nodules prevented her from tying her hair up, but after OCNT, she was able to do so again.

She also suffered from hypothermia and circulatory disorders, causing her toe skin to be blue with tingling and numbness, but the skin color has returned to a warm rosy tone, and the tingling has significantly improved. She used to wake



**Fig. 1. Graph showing the patient's white blood cell count.** OCNT was applied from April 2023, and by September of the same year, the white blood cell count had returned to the normal range.

**Table 2. OCNT Regimen Prescribed to the Patient.**

Phase Product Name	1 (2023.04 ~ 2023.09)	2 (2023.09 ~ 2023.12)	3 (2024.01 ~ 2024.04)	4 (2024.04 ~ 2024.08)	5 (2024.08 ~ present)	Remarks
Vivagin X Capsules	100	100	100	100	100	Although recommended to take it as '101', the patient took it as '100'.
Selenplex Capsules	100	100	100	100	100	
Sulfoplex PK Tablets	-	-	002	002	002	
Collaplex Granules	-	-	001	001	001	
Caroplex Granules	-	-	-	-	001	
Cyaplex Mineral Rock Salt	-	-	-	-	100	

\*101: Take once in the morning and once in the evening, one sachet/capsule each time. 100: Take once daily, one sachet/capsule in the morning. 001: Take once in the evening, one sachet/capsule. 002: Take once in the evening, two sachets/capsules.

up with her hands so swollen that she couldn't clench them, but this is almost no longer an issue. (Table 3.)

In 2018, when diagnosed, she did not work and rested at home, but since 2023, she has started a personal business. Despite working continuously, thanks to OCNT, her leukemia levels have improved, and she has been able to maintain her condition.

### Discussion

The subject of this case study is a Korean woman in her forties diagnosed with chronic lymphocytic leukemia. She was not taking any special supplements and was only using iron supplements to manage her lowered anemia levels, adjusting her diet accordingly. She experienced weight loss and severe fatigue due to stress and overwork, and has been under observation for persistent lymph node enlargement since her diagnosis.

In April 2023, considering the patient's overall health condition, Vivagin X and Selenplex were prescribed initially.

Vivagin X contains Vitamin C, Vitamin D, Vitamin E, and selenium. Vitamin C has shown toxicity against Jurkat and K562 leukemia cells, inducing cell apoptosis.<sup>6</sup> Vitamin D deficiency can negatively affect the prognosis of patients with chronic lymphocytic leukemia, so it is necessary to consume it to improve outcomes.<sup>7</sup>

Vitamin E levels are significantly reduced in patients with chronic lymphocytic leukemia, which can be interpreted as an increase in reactive oxygen species and a higher likelihood of diseases such as leukemia when Vitamin E levels drop.<sup>8</sup>

Low serum selenium levels are associated with advanced stages of chronic lymphocytic leukemia.<sup>9</sup> Therefore, the addition of Selenplex aimed to raise serum selenium levels. Selenium supplementation not only prevents leukemia but also helps inhibit the proliferation of leukemia cells.<sup>10</sup> It may also induce apoptosis of leukemia stem cells in leukemias like chronic lymphocytic leukemia, aiding in the elimination of leukemia cells.<sup>11</sup>

After the initial and secondary intake of Vivagin X and Selenplex, pre-existing disc-related lower back pain and joint pain worsened, leading to the addition of Sulfoplex PK tablets and Collaplex. From the fourth phase, due to complaints of eye

fatigue and dryness, Caroplex and Cyaplex Mineral Rock Salt were recommended.

Although this case report is not universally applicable to all patients with chronic lymphocytic leukemia because it was applied to a single patient, it reports, with the patient's consent, that her quality of life has significantly improved with the consistent, albeit small, intake of OCNT.

### References

- 1 Ghia, P., Ferreri, A. J. & Caligaris-Cappio, F. Chronic lymphocytic leukemia. *Critical reviews in oncology/hematology* **64**, 234-246 (2007).
- 2 Choi, Y. *et al.* Treatment outcome and prognostic factors of Korean patients with chronic lymphocytic leukemia: a multicenter retrospective study. *Korean J Intern Med* **36**, 194-204 (2021).
- 3 Jeon, Y. W. & Cho, S. G. Chronic lymphocytic leukemia: a clinical review including Korean cohorts. *Korean J Intern Med* **31**, 433-443 (2016).
- 4 Rai, K. R. *et al.* Clinical staging of chronic lymphocytic leukemia. (1975).
- 5 Yi, J. H. *et al.* Multicenter retrospective analysis of patients with chronic lymphocytic leukemia in Korea. *br* **56**, 243-251 (2021).
- 6 Bonilla-Porras, A. R., Jimenez-Del-Rio, M. & Velez-Pardo, C. Vitamin K3 and vitamin C alone or in combination induced apoptosis in leukemia cells by a similar oxidative stress signalling mechanism. *Cancer Cell International* **11**, 19 (2011).
- 7 Shanafelt, T. D. *et al.* Vitamin D insufficiency and prognosis in chronic lymphocytic leukemia. *Blood, The Journal of the American Society of Hematology* **117**, 1492-1498 (2011).
- 8 Al-Qaisi, R. A., Al-Gebori, A. M. & Alosami, M. H. M. Superoxide Dismutase and Vitamin E Levels in Serum as Indicators in Patients with Acute and Chronic Leukemia. *Journal of Applied Sciences and Nanotechnology* **2**, 95-105 (2022).
- 9 Azarm, T., Fazilati, M., Azarm, H. & Azarm, A.

**Table 3. Degree of Symptoms Experienced by the Patient during OCNT.** The discomfort experienced by the patient increases from 0 to 5.

Symptom \ Order	1	2	3	4	Remarks
Lymph Node Enlargement/Nodulation	5	3	2	2	Symptoms of lymph node enlargement and nodulation in the neck, armpits, and groin.
Fatigue	5	4	2	2	
Edema, Swelling	5	3	2	1	
Circulatory Disorders	5	5	3	1	Tingling, numbness, and blueish toes symptoms.

0: No symptoms, no impact on daily life. 1: Mild symptoms, almost no impact on daily life. 2: Moderate symptoms, slight adaptation needed for daily activities. 3: Significant symptoms, some difficulty in performing activities. 4: Severe difficulty in performing daily activities. 5: Daily life significantly impacted, causing severe stress.

Serum selenium levels in chronic lymphocytic leukemia. *Advanced biomedical research* **2**, 44 (2013).

- 10 Gandhi, U. H. *et al.* Selenium suppresses leukemia through the action of endogenous eicosanoids. *Cancer research* **74**, 3890-3901 (2014).
- 11 Gandhi, U. H. *The Role of Arachidonic Acid-Cyclooxygenase Pathway in the Anti-leukemic Properties of Selenium*, Pennsylvania State University, (2012).