

## 세포교정영양요법(OCNT)을 이용한 메니에르 개선 사례 연구

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## A Case Study on Improvement of Ménière's Disease through Ortho-Cellular Nutrition Therapy

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## ABSTRACT

**Objective:** A case study on improvement of Meniere's Disease through Ortho-Cellular Nutrition Therapy (OCNT).

**Methods:** A Korean female in her 40s was incapable of daily living activities due to severe Ménière's Disease symptoms. OCNT was applied and the degree of symptoms was tracked.

**Results:** Symptoms of Ménière's disease including headache and dizziness were improved after administering OCNT over approximately 4 months.

**Conclusion:** Administering OCNT may help alleviate symptoms of patients suffering difficulty in daily life due to Ménière's Disease.

**Keywords** Ortho-Cellular Nutrition Therapy (OCNT), Ménière's Disease, Migraine, Dizziness, Nausea

## Introduction

Ménière's Disease is an affliction of the inner ear, characterized by repetitive vertigo. Whereas patients appear normal in the early stages without vertigo, loss of hearing and ringing in the ears are observed in later stages. Ménière's Disease is thought to be caused by excess secretion of endolymph, an inner ear fluid, or failure to reabsorb the same.<sup>1</sup>

Clinical symptoms and hearing tests form the basis of Ménière's Disease diagnosis, but differential diagnosis is difficult as it is subjective and non-specific. Accordingly, the likelihood of misdiagnosis is high.<sup>2</sup>

For a sure diagnosis of Ménière's Disease, the patient must present with: **A.** Spontaneous dizziness attacks lasting 20 minutes to 12 hours on at least two occasions; **B.** Low-mid range sensorineural hearing loss in one ear,

or hearing loss on at least one prior occasion before, during, or after dizziness attacks presented; **C.** Tinnitus or discomfort in the affected ear, and; **D.** Symptoms that cannot be explained by other vestibular disorders. Ménière's Disease may be suspected if just symptoms A, B and D present.<sup>3</sup> However, not all Ménière's Disease patients experience these symptoms. Ménière's Disease patients also have a higher incidence of migraine than the general population.<sup>4</sup>

The most widely used drug treatment for Ménière's Disease is betahistidine. It is thought to help increase blood circulation and reduce vestibular nucleus activity. Benzodiazepines may also be used to control symptoms of acute vertigo attacks. Drug infusion in the tympanic membrane aims to deliver high doses of drugs (steroids, gentamycin) to the inner ear through absorption into the inner ear through the round window, while avoiding systemic side effects. This method may cause tympanic membrane perforation or otitis media. However, while these drugs are useful for managing the symptoms of Ménière's Disease, there is no clear evidence that they alter the natural course of the disease.<sup>5</sup>

Patients with severe Ménière's Disease sometimes undergo surgery. There are various methods of surgery that are possible, taking into account the patient's

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condition, including endolymphatic sac decompression, vestibular neurectomy, labyrinthectomy, and endolymphatic sac ablation.

However, while endolymphatic sac decompression and ablation significantly improve vertigo,<sup>6</sup> tinnitus was not significantly improved, and aftereffects such as worsened hearing occur. Vestibular neurectomy has advantages in preserving hearing, but has a greater risk of complications than labyrinthectomy because it is an intra-dural procedure. That said, loss of hearing may ultimately occur in the long term. Labyrinthectomy carries a high risk of hearing loss and does not guarantee the same effect in all patients.<sup>7</sup>

This case report, wherein significant improvement of Ménière's Disease, a condition difficult to both diagnose and treat, was achieved after administering OCNT, is submitted with patient consent.

## Case

### 1. Subject

The subject was a single patient suffering from Ménière's Disease.

- 1) Name: Kwak, O O (F/48)
- 2) Name of diagnosis: Ménière's Disease
- 3) Date of onset: 2022
- 4) Duration of treatment: August 2023 to December 2023
- 5) Chief complaint(s): Sudden fainting and dizziness, repeated vomiting (symptom aggravated during ovulation), back of head pain, migraine, heavy-headedness, tremor of hands and feet, eye tremor, heart palpitations
- 6) History: None
- 7) Social history: None
- 8) Family history: Paternal - stomach cancer, hypertension  
Maternal - gastritis, otolithiasis
- 9) Drugs taken: None

### 2. Methods

Cyaplex F Syrup (101, one 10mL sachet twice a day),  
Betaplex (101, one sachet twice a day)  
Vivagin F (202, two capsules twice a day),  
Sini Powder (101, one sachet twice a day)  
OCNT was administered as above for approximately 4 months.

## Result

We consistently followed up on the patient's condition for 4 months, and administered various methods including Jubaplex, Cyaplex Bamboo Salt and Vivarol in accordance with symptoms every 3 days to alleviate the patient's chief complaint. As a result, the frequency of

discomfort has now decreased significantly, with the patient feeling discomfort once every two weeks. Most of the symptoms have almost disappeared. The patient was also diagnosed to have suffered no damage to the auditory nerve (Table 1).

**Table 1. Indicators relating to improved symptoms in patient after starting OCNT.**

Symptom	1st follow-up	2nd follow-up	3rd follow-up	4th follow-up	5th follow-up
Dizziness	5	4	4	2	1
Frontal headache	5	3	4	1	1
Back of head pain	5	2	4	2	1
Nausea	5	4	5	3	1
Tremors	5	2	1	1	1

1: The symptoms are minor and have little effect on daily life.

2: The symptoms are more pronounced, and some adjustment is needed for daily life activity.

3: Symptoms significantly affect daily life activity and patient has difficulty performing some activities.

4: Patient experiences great difficulty performing daily life activities.

5: Patient constantly feels discomfort during daily life activities and resulting stress is severe.

## Discussion

The patient was a Korean female who visited several university hospitals when symptoms first presented, but these hospitals failed to provide an accurate diagnosis. The patient was recently diagnosed with Ménière's Disease and autonomic dysfunction. In the meantime, the patient was also orthopedically diagnosed with minor nerve compression at several locations on the cervical spine.

Symptoms of the patient in the case at hand include frequent dizziness, frontal headache (headache in front of the head), back of head pain (headache in the back of the head), nausea and tremors. Pain was aggravated during ovulation and menstruation, rendering the patient unable to carry out daily living activities. The patient was unable to wash her hair as tilting or even turning her head caused dizziness.

Compared against healthy controls, patients with Ménière's Disease have a higher prevalence of endolymphatic hydrops of the vestibular organ, higher prevalence of autoimmune disease, may experience inflammation due to autoimmune and autoinflammatory processes, and may be prone to endolymphatic hydrops according to stress levels.<sup>8,910</sup>

Accordingly, OCNT was proposed for the patient's symptoms, as OCNT strengthens the lymphatic system and blood vessels and restores normal immune function. As a basic OCNT regiment, Cyaplex F, Betaplex, and Vivagin F was recommended, with follow-up every 3 days to modify the OCNT with Jubaplex, Cyaplex Bamboo Salt and Vivarol, etc. in accordance with symptoms.

Cyaplex F syrup contains anthocyanin, quecetin, rutin, EGCG, chlorogenic acid, and vitamin C. It is thought that the antioxidants in Cyaplex F help patients with Ménière's Disease as Ménière's Disease patients have higher systemic oxidative stress than healthy persons.<sup>11</sup>

The beta-glucan in Betaplex is extracted from oats. Betaplex was used to alleviate nausea due to Ménière's Disease and gastritis caused by indigestion.<sup>12</sup>

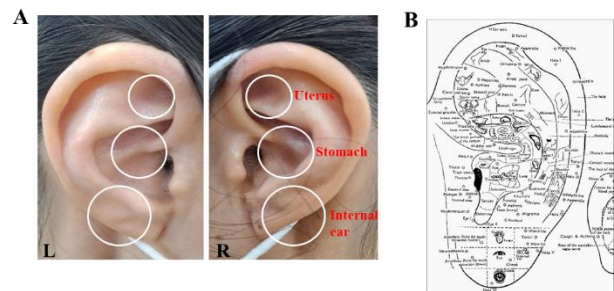
Minerals are important substances that perform many functions in the body. Some minerals play an important role in the optimal functioning of the immune system, and are involved in both the innate defense system and adaptive immune response, impacting the occurrence of chronic illness.<sup>13</sup> Therefore, the Vivagin F, which contains minerals, was recommended as part of the basic regiment. The vitamin D in Vivagin F is used to activate immune cells and regulate the function of the immune system.

The Zizyphi Semen in Jubaplex has a sedative effect which alleviates dizziness and nausea. Whereas the precise mechanism is unknown, a low sodium diet is reported as an effective treatment for Ménière's Disease patients; the patient was accordingly instructed to substitute normal salt with Cyaplex Bamboo Salt.<sup>14,15</sup>

In addition, Ménière's Disease may also suffer migraine due to the symptoms of the illness, and although its mechanism is yet unknown, Vivarol was also recommended to alleviate symptoms of Ménière's Disease, which is thought to be an autoimmune disease, and to alleviate migraines which are a chronic inflammatory neurological disease.<sup>16-18</sup>

In Korean Medicine, the ear is considered a miniature version of the human body. The tissues and organs of the human body are represented by points on the ear. Ear acupuncture is a method of diagnosing and treating physical and mental dysfunction by stimulating specific points in the ear.<sup>19</sup> Ear stimulation is reported to be associated with a variety of activities in the body, including nerve reflex, neurotransmitters, the cytokine immune system and inflammatory response.<sup>19-21</sup> Currently, ear acupuncture is being used to treat pain, anxiety, obesity, epilepsy and sleep disorders, but its effects have not yet been extensively studied.<sup>22,23</sup> In traditional Chinese medicine, the ear is closely linked to

the meridian system associated with auxiliary blood vessels and organs throughout the body, and the ear is part of the body while also representing the whole body.<sup>22</sup> The specific shape of the ear may change depending on current state of health. Referring to the traditional Chinese ear reflex point chart, the patient of the case at hand, presenting with deep indentation in the inner ear and papules at the reflex points representing the stomach and uterus, was determined to have problems in the corresponding organs (Fig. 1).



**Fig. 1. The cause of Ménière's Disease from the perspective of Korean Medicine.** A Ear shape of a Ménière's Disease patient. B Chinese ear reflex point chart (Rice, Tom. *Soundselves: An acoustemology of sound and self in the Edinburgh Royal Infirmary*. *Anthropology Today*. 19. 4 - 9. 2003)

Abnormalities in the inner ear are directly associated with Ménière's Disease, and it is possible that Ménière's Disease is also associated with uterine and gastric problems. First, in light of adverse reaction at the uterus reflex point and aggravation of Ménière's Disease symptoms during ovulation and menstruation, it is possible that Ménière's Disease is affected by the female hormone cycle and rhythm. In some patients, Ménière's Disease symptoms are reported to present before and after menstruation. Vertigo symptoms improve during pregnancy. Cessation of the menstrual cycle due to pregnancy coincides with improvement of Ménière's Disease symptoms, which reappear after childbirth.<sup>24</sup> In addition, Ménière's Disease patients among menopausal females had lower levels of estradiol than healthy menopausal females, and such hormone level difference is reported as correlated with hearing problems.<sup>25</sup> It has been reported that appropriate hormonal therapy has helped alleviate symptoms.<sup>26</sup>

Second, intestinal metaplasia was suspected given the response at the stomach reflex point. Endoscopic findings were consistent (data not shown). Based on these findings, it was suspected that adverse reaction of the stomach is one of the causes of Ménière's Disease. This was based on the fact that Ménière's Disease can be described as a lymphostatic response in the inner ear,

which causes abnormal pressure.<sup>27,28</sup> It is possible that such lymphostatic response may alter pressure levels of the sac-shaped organs in the body, i.e. the stomach, uterus, heart and brain. The symptoms of vomiting, nausea, gastric erosion and ulcers are similar to the clinical characteristics of the rare Menetrier Disease. Menetrier Disease patients tend to have increased transforming growth factor (TGF)-alpha, which activates the signaling pathway of epidermal growth factor receptor (EGFR), causing hyperplasia of the mucosal epithelial cells and thickening of the gastric mucosa.<sup>29</sup> Ménière's Disease patients also present with reduced blood pressure regulation ability compared to healthy persons.<sup>30</sup> In this context, the thickened gastric mucosa, causes pressure build-up in the uterus, and increased stomach pressure naturally leads to increased pressure in the brain, in turn leading to pressure build-up in the ears. Through this process, Ménière's Disease patients' ability to regulate pressure decreases, causing lymphatic stagnation. In addition, patients experience dizziness when tilting the head forward. This means that the visceral organs and stomach are compressed, causing an increase in brain pressure and severe lymphatic stagnation in the ear. The patient's family history includes a history of gastrointestinal disease, and a history of otolithiasis on the maternal side suggests this is plausible.

In some respects, this method of diagnosis may seem rather odd. It appears ironic that the ears, which are part of the body and have a relatively small surface area, represent various body parts. First of all, the concept of dermatomes must be understood. Dermatomes are areas of skin on the body that rely on specific nerve connections to the spine. All skin sensations are transmitted by peripheral nerves that are spread over the extremities. The peripheral nerve root extends from the dorsal horn of the spinal cord, and in cases where the site of paresthesia coincides with a given dermatome, the problem experienced by the patient is likely to be associated with the peripheral nerves serving the dermatome.<sup>31,32</sup> From this perspective, the deep indentation in the ear dermatome of the patient, which includes the inner ear, suggest that the patient is suffering from problems with the corresponding organ. Also, the clear difference observed pre- and post-OCNT in the ear dermatome which represents the uterus and stomach indicates that the reflex points and auxiliary blood vessels of the organs are closely associated (Fig. 2). As the VAS (Visual Analog Scale) Score, which represents only the subjective opinion of the patient, was improved to 1 or 0, this relationship cannot be precluded.



**Fig. 2. Ear morphology changes in the patient after OCNT.** The overall skin tone of the patient's ear dermatome corresponding to the uterus and stomach was brightened after OCNT. Whereas there was indentation of the lower portion of the ear which represents the inner ear prior to OCNT, this area became relatively flat post-OCNT.

This case is a single case and is not universally applicable to all Ménière's Disease patients. There are limitations in interpreting the outcomes as there is insufficient scientific evidence for the association between auriculotherapy in traditional Chinese medicine and the dermatomes used for occupational therapy and physiotherapy. That said, the present case is reported with patient consent as OCNT was employed to improve symptoms of an as-of-yet incurable disease whose mechanism and therapeutic methods have yet to be found, and auriculotherapy was used to attempt a novel clinical diagnostic method.

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