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0Case Report

세포교정영양요법(OCNT)을 이용한 자궁경부 이형성증 개선 사례

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Improvement of Cervical Dysplasia Using Ortho-Cellular Nutrition Therapy (OCNT): A Case Report

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ABSTRACT

Objective: Human papillomavirus (HPV) is a common DNA virus, with more than 80% of sexually active women estimated to acquire an HPV infection before the age of 45 years. HPV plays a major role in the development of gynecological conditions, including cervical dysplasia and cervical cancer. Cervical dysplasia is characterized by abnormal changes in cervical cells and tissues due to factors such as HPV infection, smoking, and stress. It is diagnosed using cervical cytology and colposcopy and graded according to the extent of abnormal cellular involvement. Management ranges from follow-up surveillance to direct lesion removal, depending on disease grade.

Case Report: This case involved a Korean woman in her 20s diagnosed with cervical dysplasia who additionally presented with severe dysmenorrhea, dizziness, and abnormal uterine bleeding. Ortho-Cellular Nutrition Therapy (OCNT) was administered, incorporating anthocyanins, omega-3 fatty acids, heme iron, vitamin B12, and folate. Approximately 3 months after initiating OCNT, the patient reported improvement in overall symptoms. Normal findings were confirmed 6 months after the initial diagnosis, and complete recovery was assessed at a 1-year follow-up examination.

Conclusion: As this report involved a single patient, there are limitations in applying the same OCNT protocol universally to all patients with cervical dysplasia. Nevertheless, this case is meaningful in demonstrating that symptomatic and disease improvement can be achieved through a simple OCNT intervention.

Keywords Ortho-Cellular Nutrition Therapy (OCNT), Cervical dysplasia, Human papillomavirus (HPV), Cervical cancer

Introduction

Human papillomavirus (HPV) is a DNA virus belonging to the Papillomaviridae family and is one of the most common infectious pathogens transmitted through skin or mucosal contact, including sexual contact. This virus is widely transmitted, with more than 80% of the sexually active population estimated to acquire an HPV infection before the age of 45 years, and infection rates have been reported to be particularly high among women aged 25–35 years. In addition, the prevalence of this viral infection has shown a gradually increasing trend in Asia. Notably, this virus has been shown to have a substantial impact on the development of female cancers, including cervical, vulvar, and vaginal cancers.[1]

Cervical dysplasia refers to abnormal changes in the cells and tissues of the cervix that result in neoplastic-like features. Although HPV infection is well known as the major cause of this condition, cervical dysplasia does not develop solely as a result of HPV infection. Other factors, including toxins associated with smoking and stress, may also contribute to its development. However, when viral infection persists or the virus remains in cervical tissue for a prolonged period, the likelihood of developing cervical dysplasia gradually increases, along with the risk of progression to invasive cancer.[2]

Cervical dysplasia is initially evaluated using cervical cytology, in which cervical cell samples are collected using a swab or similar device and examined microscopically. If abnormal tissue is detected on this examination, colposcopy is performed to observe the lesion in greater detail. When abnormal

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cells or cancer cells are identified, a diagnosis of dysplasia or cervical cancer is made according to the severity of the findings. In cases of dysplasia, the condition can be classified into grades 1, 2, and 3 according to the extent of abnormal cellular involvement within the epithelium. Grade 1 dysplasia may be regarded as a cellular alteration caused by transient HPV infection, but follow-up examinations at 6-month intervals are required to monitor whether the condition worsens. In grade 2 or 3 lesions, if left untreated, overexpression of viral oncogenes may induce cellular proliferation, disrupt the regulation of cellular differentiation, and lead to abnormal proliferation of undifferentiated cells. If this process persists, there may be a risk of progression to invasive cervical cancer.[3]

When dysplasia is detected, low-grade lesions may regress spontaneously; therefore, follow-up cervical cytology is performed at 6, 12, and 24 months after the initial examination. However, when high-grade dysplasia is diagnosed, surgical treatment may be performed. In the past, hysterectomy was commonly used, whereas it is now performed only in limited cases, such as in older women with concomitant uterine lesions. Recently, approaches that preserve the uterus and remove only the lesion have been primarily used. These include destructive methods, such as cryotherapy, electrocoagulation, and laser ablation, which destroy the affected tissue, and excisional methods, in which the lesion is directly removed using a laser or an electrical loop/wire.[4] Therefore, the severity of the lesion should be determined through accurate diagnosis, and appropriate treatment and adjunctive therapy should be selected according to the patient's condition.

This case involved a Korean woman in her 20s who was diagnosed with cervical dysplasia after abnormal findings were identified on cervical cytology. In addition to dysplasia, the patient presented polycystic ovary syndrome, dysmenorrhea, and abnormal uterine bleeding. Therefore, Ortho-Cellular Nutrition Therapy (OCNT) was administered. As a result, the patient showed overall symptomatic improvement and was confirmed to have achieved complete resolution of dysplasia. This case is reported with the patient's consent.

Case Study

1. Subject

This case report involved a single patient with cervical dysplasia.

1) Name: Lee OO (23 years old, F)
2) Diagnosis: Stage 1 cervical dysplasia
3) Date of onset: March 2025
4) Treatment period: April 2025 to present
5) Chief complaints: Polycystic ovary syndrome, dysmenorrhea, dizziness, and abnormal uterine bleeding
6) Past medical history: None
7) Social history: None
8) Family history: None
9) Present illness and current medications: None

2. Methods

The following OCNT regimen was prescribed.

• Primary OCNT (April 2025 to March 2026)

- Cyaplex X capsule 202, two capsules per dose, twice daily
- Hemoplex capsule 202, two capsules per dose, twice daily
- Eufaplex Alpha capsule 303, three capsules per dose, twice daily

• Secondary OCNT (March 2026 to present)

- Cyaplex X capsule 200, two capsules per dose, once daily
- Hemoplex capsule 200, two capsules per dose, once daily
- Eufaplex Alpha capsule 300, three capsules per dose, once daily

• Other recommendations

During OCNT, the patient was instructed to concurrently follow the recommendations below.

- Engage in regular exercise
- Reduce stress
- Reduce the intake of flour-based foods, milk, and dairy products

Results

The patient presented with severe dysmenorrhea, dizziness, and abnormal uterine bleeding. In March 2025, she was diagnosed with stage 1 cervical dysplasia and polycystic ovary syndrome after a hospital examination. Accordingly, OCNT was prescribed to improve these conditions. After 3 months of OCNT administration, the patient reported significant improvement in overall symptoms. Subsequently, cervical cytology performed in September 2025 showed normal findings, and complete recovery was confirmed at the follow-up examination conducted 6 months later.

Discussion

The patient in this case had routinely complained of severe dysmenorrhea and dizziness and reported abnormal uterine bleeding outside the menstrual period. She had previously been diagnosed with polycystic ovary syndrome. Following further examination, she was diagnosed with stage 1 cervical dysplasia. The patient therefore visited a pharmacy to manage cervical dysplasia and alleviate her associated symptoms. Based on patient consultation and assessment of her overall symptoms, it was considered beneficial to promote symptomatic improvement by enhancing antioxidant and inflammatory regulatory functions, improving immune function, and supporting hematopoietic function. Accordingly, OCNT was prescribed.

Cyaplex X was initially prescribed to support the patient's antioxidant and immune functions and to facilitate the elimination of toxins from the body. The main components of Cyaplex X are anthocyanins, which are abundant in berries, and alginic acid, which is found in brown algae such as kelp. Anthocyanins contain multiple polyhydroxy groups, which may directly contribute to the scavenging of reactive oxygen species associated with oxidative stress in the body. They are also known to be involved in the activity of antioxidant enzymes such as superoxide dismutase (SOD) and catalase (CAT).[5] Based on these properties, anthocyanins may contribute to the overall improvement of immune responses by suppressing inflammatory signaling pathways and reducing inflammatory cytokines.[6]

Alginic acid is a polysaccharide that is abundant in brown algae and is currently widely used in food additives, health functional foods, and pharmaceutical products. It has previously been reported to have functions such as reducing blood cholesterol levels and protecting the gastric mucosa. However, recent studies have shown that alginic acid may also help reduce

the intestinal absorption of heavy metals such as strontium and cesium and promote their excretion.[7] Therefore, these components are considered to have contributed to the improvement of the patient's overall health status.

Omega-3 was subsequently used to improve the patient's regulation of inflammatory responses. Omega-3 fatty acids are a type of polyunsaturated fatty acid. Fatty fish such as salmon, mackerel, and tuna are generally considered major dietary sources. However, omega-3 fatty acids may also be derived from microalgae and certain plants, including perilla and flaxseed. These fatty acids contribute to changes in the fatty acid composition of cell membranes, thereby reducing the production of pro-inflammatory signaling mediators such as prostaglandins and leukotrienes. They may also help improve systemic inflammatory responses by reducing pro-inflammatory cytokines, including TNF-α and IL-1β, and increasing anti-inflammatory cytokines such as IL-10.[8]

The patient was experiencing abnormal uterine bleeding and dizziness. Abnormal blood loss may lead to a reduction in red blood cells, which are responsible for oxygen transport throughout the body. If normal hematopoietic function is not adequately maintained, anemia may develop and result in dizziness. In this context, balanced supplementation with iron, folate, and vitamin B12 may be beneficial. Iron is an essential component of hemoglobin, which enables red blood cells to transport oxygen, and an adequate iron supply is required for hematopoiesis. Vitamin B12 and folate are involved in DNA synthesis and help support proper cell proliferation and differentiation during erythropoiesis in the bone marrow.[9] These nutrients were provided through the prescription of Hemoplex.

Following the above OCNT regimen, the patient reported an overall reduction in discomfort during daily life, including improvement in dysmenorrhea and dizziness and a decrease in abnormal uterine bleeding. Subsequent hospital examinations also showed normal findings, and the patient was assessed as having completely recovered, suggesting that OCNT had a positive effect on symptomatic improvement in this patient. However, because this case involved a single patient, there are limitations in applying the same regimen to other patients with cervical dysplasia. Nevertheless, this case is reported with the patient's consent, as improvement in cervical dysplasia and related symptoms was confirmed based on both the patient's subjective report and examination findings.

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