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Case Report-A learning from clinical experiential history

세포교정영양요법(OCNT)을 이용한 장상피화생 환자 사례 연구

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Case Study of an Atrophic Gastritis Patient Using Cell Correction Nutritional Therapy (OCNT)

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ABSTRACT

Objective: To report a case of improvement in atrophic gastritis using cell correction nutritional therapy.

Methods: A 67-year-old Korean female with impaired digestive function and symptoms of abdominal bloating and hypochlorhydria.

Results: Following the application of nutritional therapy, the severity of symptoms was alleviated, ultimately resulting in a complete resolution of atrophic gastritis.

Conclusion: Nutritional therapy may be beneficial in alleviating symptoms and aiding in the treatment of patients presenting with atrophic gastritis symptoms.

Keywords Ortho-Cellular Nutrition Therapy (OCNT), intestinal metaplasia, atrophic gastritis

Introduction

Acute gastritis, chronic gastritis, non-atrophic gastritis, atrophic gastritis, intestinal metaplasia, and gastric cancer are representative diseases that occur in the stomach. Among them, intestinal metaplasia refers to the transformation of the surface (mucosa) of the stomach wall into a surface resembling that of the small intestine. The exact cause of intestinal metaplasia has not been fully elucidated, but it is believed to primarily develop through chronic gastritis, particularly atrophic gastritis. Therefore, it is considered that long-term inflammation of the stomach wall is a contributing factor to the development of intestinal metaplasia.[1] In other words, during the regeneration process of the gastric mucosal cells in response to inflammation or injury, the gastric mucosa undergoes a transformation resembling that of the intestinal mucosa. It is hypothesized that the inflammatory response in this process contributes to such changes.[2] In modern medicine, there is no definitive treatment method for curing intestinal metaplasia. Intestinal metaplasia cells are considered as precancerous cells since they can progress to gastric cancer through dysplasia. When intestinal metaplasia is diagnosed through endoscopic examination, regular follow-up endoscopy is conducted in the hospital to monitor the progression. The only option available in

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modern medicine when intestinal metaplasia progresses to gastric cancer through regular observation is to perform early surgical intervention. From the patient's perspective, being diagnosed with intestinal metaplasia brings about feelings of uncertainty and depression, as they do not know when it may progress to cancerous cells. This cycle of anxiety can lead to a vicious cycle. Due to this anxiety, patients who previously had no issues with digestion may suddenly experience discomfort and difficulties in digestion after being diagnosed with intestinal metaplasia. Research has shown that patients with intestinal metaplasia have an 11-fold higher risk of developing gastric cancer compared to the general population.[1] According to the cancer incidence rates in South Korea in 2018, gastric cancer had the highest incidence, indicating the need for regular observation and caution in patients with intestinal metaplasia in the country.

The patient in this case experiences frequent belching and flatulence, and their quality of life is significantly compromised due to symptoms such as regurgitation and discomfort upon waking up. We would like to report the progress of applying nutritional therapy to such a patient.

Case Study

1. Subject

We conducted a case study on a patient with intestinal metaplasia.

Name: Jeon O O (F/67 years old)

Diagnosis: Intestinal metaplasia

Onset date: February 24, 2019

Treatment period: November 2019 - April 2020 (approx. 6 months)

Symptoms: Trimming, flatulence, belching, abdominal discomfort, throat irritation, nocturia

Past medical history: Cholecystectomy, liver transplantation, removal of dentures

Social history: None

Family history: None

Current medications: None

2. Method

Digestive Support Herbal Granules

Cyaplex A (101, twice a day, 1 sachet per day)

Heartberry Black (101, twice a day, 1 sachet per day)

Eufaplex (101, twice a day, 1 sachet per day)

Calmaplex (101, twice a day, 1 sachet per day)

These herbal granules were taken for approximately 6 months.

Dietary Guidelines

Precautions (General Precautions)

* Refrain from alcohol, flour food (especially ramen, bread), fried food, coffee, and excessively spicy food.

* Excessive fruit causes inflammation by increasing sugar toxin, so should be consumed in moderation.

* Avoid cold water, fizzy drinks, processed juices, and sugary yogurt.

* Avoid foods cooked with edible oil as they can become acified due to heat, leading to the formation of oxidized oil residues that can cause inflammation in cell membranes.

* It is good for the stomach when food is 38 degrees. Always eat food warm.

* Blanching cruciferous vegetables such as cabbage and broccoli is good for the stomach.

* Refrain from stir-fried, deep-fried, or grilled food and eat it in the form of blanching or boiling.

E.g.) Fried egg (X) --> Steamed, boiled egg (O).

Fried chicken (X)--> Fish or red meat boiled in plain water (O).

Pork belly (X) --> Bossam (O), pig's feet (O)

Galbitang, Seolleongtang (O)yy

* No dairy products, including milk.

[Dietary Guidelines] 3 meals a day. Follow a regular and moderate amount of Korean-style meals as the basis.
1. Choose multi-grain rice, and if digestion is poor, temporarily switch to white rice. Include various vegetables, seaweed, fish, and fermented condiments (such as soybean paste, soy sauce, and fermented soybean paste) in your diet.
2. Include beans, carrots, pumpkins, garlic, onions, and wild greens as vegetables, and consume seaweeds such as seaweed, kelp, and dried seaweed.
3. Use only natural sea salt (cheonil salt) as a seasoning.

Results

The patient in this case was elderly and had a history of liver transplantation and removal of a prosthesis, indicating a decline in bodily functions. Particularly, cells, leading to slower healing. After applying nutritional therapy, the leg cramps ceased after 2 months. Symptoms such as bloating, flatulence, and belching, which can occur in hypochlorhydria, improved by frequent leg cramps suggest a significant decrease in the liver's blood storage function, even if regeneration has occurred after liver transplantation. This factor is likely to affect the regenerative capacity of gastric mucosal approximately 70% after several months. The sensation of acid reflux, which was occasionally experienced, also disappeared (Table 1).

Table 1. Changes in Symptom Scores Over Time After Application of OCNT. On a Scale from 1 to 5, Symptoms are More Severe.

Symptom	1st 2019.11	2nd 2020.01	3rd 2020.02	4th 2020.04	Remarks
Belching	5	3	2	0	
Flatulence	5	3	2	0	
Tongue coating	5	3	2	0	
Numbness in legs	5	0	0	0	
Acid reflux	3	1	0	0	
Intestinal metaplasia	5	3	2	0	

Discussion

The exact causes and mechanisms of gastric metaplasia are not yet fully understood, but from another perspective, it can be attributed to cellular membrane alterations, oxidation leading to reduced oxygen saturation, and dysregulation of downstream gene expression. According to the experimental findings of Dr. Otto Heinrich Warburg, a Nobel laureate from Germany, when oxygen saturation falls below 65%, cells can either die or differentiate into cancer cells. However, it should be noted that this hypothesis is still under investigation, and further research and evidence are needed to support these claims.[3] In addition, it should be noted that as aging progresses, the ability of antioxidant enzymes decreases and cell membranes are easily damaged due to the increase in active oxygen.[4] Colonic metaplasia is recognized as a precancerous condition in modern medicine, and previous research suggests that the oxygen saturation level may play a role in the differentiation of colonic metaplasia cells into gastric cancer cells. Additionally, the age-related decline in antioxidant enzyme activity can induce excessive stress on the gastric mucosal cells, potentially increasing the risk of atrophic gastritis progressing to colonic metaplasia. It should be noted that complete remission cases of colonic metaplasia have not been reported in modern medicine. According to the theory of epigenetics, gene expression can be regulated by the surrounding environment and lifestyle factors.[5] Indeed, excessive stress is believed to hinder normal gene expression and can contribute to cellular membrane alteration and the development of diseases such as colonic metaplasia.

In this case, the patient is elderly and has previously undergone liver transplantation and a splenectomy. After these surgeries, the patient experienced leg cramping symptoms. It was believed that the lack of normal liver function recovery prevented adequate nourishment of the muscles, leading to this condition. Additionally, it was thought that the patient's mucosal cell regeneration ability was delayed, making symptom improvement challenging. However, an unexpected turn of events occurred. After starting nutritional therapy, the leg cramping symptoms disappeared, and symptoms such as bloating, excessive gas, and belching that can occur in hypochlorhydria were alleviated. Furthermore, the discomfort caused by globus sensation (a feeling of a lump in the throat) no longer occurred. While globus sensation is generally associated with excess stomach acid, it can also occur due to the relaxation of the esophageal sphincter in cases of hypochlorhydria. Therefore, there is a possibility that the nutritional therapy applied to the patient helped in the recovery of the liver and gallbladder and improved the hypochlorhydria. Substances that possess antioxidant enzyme functions, which decline with aging, are considered important for the normal functioning of cells. In this regard, sialic acid, found in sialic acid-containing

compounds like Cyaplex, has been reported to have antioxidant capabilities and may regulate the stress on gastric mucosal cells.[6] Furthermore, Eufaplex contains a balanced amount of essential polyunsaturated fatty acids, which include non-oxidized fatty acids necessary for cellular membrane synthesis. Therefore, it can assist in the synthesis of damaged cellular membranes.[7] Due to atrophic gastritis, there is a decrease in gastric acid secretion, leading to hypochlorhydria. In relation to this, it has been reported that epigallocatechin gallate (EGCG), a polyphenol found in Heartberry Black, has various functions such as regulation of glucose metabolism, modulation of α-amylase and α-glucosidase activity, and protection of internal organs.[8] It is possible that this could be helpful in improving the digestive function impairment caused by hypochlorhydria. However, it should be noted that this case study is limited in its interpretation of results since it represents a single case where nutritional therapy was applied to overcome atrophic gastritis. Nonetheless, considering the improvement of symptoms that previously caused discomfort in the patient's daily life and the potential role of nutritional therapy in the resolution of atrophic gastritis, it is worth reporting with the patient's consent.

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