

세포교정영양요법(OCNT)을 이용한 역류성식도염 환자 사례 연구

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A Case Study of Patients with Reflux Esophagitis Using Ortho-Cellular Nutrition Therapy (OCNT)

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ABSTRACT

Objective: A case report on improving the symptoms of patients with reflux esophagitis by Ortho-Cellular Nutrition Therapy (OCNT).

Methods: A 61-year-old Korean male who has been taking proton-pump inhibitors in the hospital for a long time due to the symptoms of reflux esophagitis.

Results: The practice of Ortho-Cellular Nutrition Therapy (OCNT) restored the patient's mucosal cells of the esophageal sphincter, which led to the judgment that he was cured of reflux esophagitis.

Conclusion: Ortho-Cellular Nutrition Therapy (OCNT) can be effective in relieving the symptoms of patients with reflux esophagitis.

Keywords Ortho-Cellular Nutrition Therapy (OCNT) and Reflux esophagitis

Introduction

1. About reflux esophagitis

Reflux esophagitis is a disease in which gastric acids or stomach contents that have refluxed into the esophagus cause burning pain or soreness in the chest. The esophageal sphincter between the esophagus and the stomach opens only when swallowing food or burping, thereby preventing stomach contents from flowing back into the esophagus. Reflux esophagitis is the backward

flow of gastric fluids into the esophagus when the esophageal sphincter is weak or opens in an inappropriate way. Even in healthy people, sometimes gastric fluids flow backward but immediately flow down through the esophageal movement. Therefore, most of them have no related symptoms. Reflux esophagitis causes sore and painful symptoms by irritating the mucous membranes of the esophagus as gastric acids and stomach contents that have flowed back into the esophagus irritate the esophageal mucosa. In severe cases, it may result in esophagitis, esophageal ulcers, strictures, and the like. Occasionally, gastric acids flow into the throat through the esophagus, causing laryngitis, asthma, or chronic cough. The tightening of the lower esophageal sphincter and diaphragm anatomically prevents the reflux of gastric fluids into the esophagus in healthy individuals. Even if gastric acids and stomach contents are refluxed, it functionally allows them to flow down through the immediate esophageal movement, preventing the esophagus from being damaged. When the anatomical structure or function that prevents their reflux is impaired,

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it causes reflux esophagitis.

A. Causes of reflux esophagitis

1) The esophagus is connected to the stomach through a narrow opening in the diaphragm (esophageal hiatus); as the lower esophageal sphincter is positioned in line with the diaphragm, the tightening of the diaphragm strengthens the lower esophageal sphincter, thereby preventing the reflux of gastric fluids.

If esophageal hiatal hernia, in which part of the stomach enters the thoracic cavity due to increased abdominal pressure, occurs, the tightening of the diaphragm loosens, and the esophageal hiatus widens, making it easy to develop reflux esophagitis.

2) In most of healthy people, the tightening force of the lower esophageal sphincter is maintained at about 15mmHg, but the pressure of the sphincter is lowered for those with smooth muscle diseases, such as scleroderma, etc., causing the reflux of gastric acids and stomach contents easily with severe esophagitis.

In most cases of patients with reflux esophagitis, they have normal sphincter pressure, but some of those with poor dietary habits develop reflux symptoms due to the low sphincter pressure and sphincter that is not always closed and is opened in an inappropriate way.

Factors that lower the pressure of the lower esophageal sphincter include caffeine (coffee and soft drinks), alcohol (beer and red wine), overeating, fatty foods, smoking, etc. They not only weaken the functions of the sphincter but also stimulate the secretion of gastric acids. Among stomach contents that are refluxed, especially gastric acids, are a major cause of damaging the esophageal mucosa and of developing the soreness symptom.

Irregular dietary habits cause stomach acids to be secreted at any time. Particularly, overeating or drinking causes hyperacidity, damaging the esophageal mucosa severely. In addition, it is necessary to examine whether the drugs patients have taken can cause damage to the esophagus by weakening the esophageal sphincter and causing the reflux of gastric acids or stomach contents.

3) Esophageal dysfunction causes refluxed gastric acids to remain in the esophagus for a long time, which may result in severe esophagitis.

4) Its dysfunction causes food to remain in the stomach undigested for a long time, causing the reflux of gastric fluids easily. To put it simply, it is like air coming out of balloons full of air more forcefully than those that are not.

Overeating causes a lot of secretion of digestive fluids and an increase in gastric pressure, so it easily causes the reflux of gastric acids or stomach contents.

5) Obesity is also one of the important factors that cause gastroesophageal reflux diseases.

B. Symptoms

1) Typical symptoms

Reflux esophagitis is a disease that causes a burning pain or burning sensation, mainly in the chest behind the sternum, due to gastric acids that have flowed back into the esophagus. Its representative symptom, a burning sensation in the chest (heartburn), refers to a burning or sore feeling arising from the tip of the solar plexus or the back of the sternum to the mouth. Occasionally, if gastric acids or food that have remained in the stomach flow back to the mouth, the related patients may feel a bitter taste or complain of soreness after eating. The symptoms of reflux esophagitis become worse when lying down or bending forward but improve when drinking water or taking antacids. The relevant patients sometimes complain of 'stinging', 'burning', 'feeling pain', 'heartburn', etc. Patients complaining of 'having the heartburn', 'having a burning feeling in the stomach', or 'stinging' are diagnosed with dyspepsia, but some of those symptoms may be caused by reflux esophagitis.

2) Atypical symptoms

Reflux esophagitis can cause chest pain like angina pectoris, as well as heartburn or dysphagia due to gastric acids that have flowed back into the esophagus. Confirming the results of coronary angiography performed on patients hospitalized with severe chest pain, reflux esophagitis is often found to be its cause in most normal patients. Refluxed gastric acids can cause chronic laryngeal symptoms, such as a hoarse voice, foreign body sensation in the laryngopharynx, etc., chronic cough, or asthma by irritating the laryngopharynx or respiratory tract. It is known that 16-48% of patients with chronic laryngeal disorders also have reflux esophagitis.

C. Diagnosis and medical examination

The following tests are performed to diagnose gastroesophageal reflux disease.

1) Diagnosis by symptoms

Patients with the characteristic symptoms of heartburn and reflux of gastric acids may be suspected of having reflux esophagitis. The symptoms of gastroesophageal reflux

disease become worse when lying down or bending forward but improve when drinking water or taking antacids.

2) Endoscopy

Endoscopy can be used to check for damage to the esophagus caused by the reflux of gastric acids. The diagnosis of reflux esophagitis is made when there is erosion along the gastroesophageal junction. Recurrent reflux esophagitis makes the esophageal hiatus get narrower, causing esophageal strictures and making it difficult to swallow food. Although endoscopy is the most objective examination method, it has limitations in that more than half of patients with gastroesophageal reflux disease are found to appear normal without erosive esophagitis.

3) Ambulatory esophageal pH testing for 24 hours

It is intended to confirm and diagnose how much pathologically excessive acid reflux occurs during a day by measuring the acidity (pH) of the esophagus for more than 24 hours. The esophageal pH test is to insert a thin tube with a sensor into the esophagus through the nose to measure the pH four times a second and then record the measured data on a portable device for a long time. Patients can comfortably eat and go about their daily lives in their own homes while the examination is in progress. The patients simply press a button to display symptoms as they occur. Therefore, a 24-hour pH test is good to see if the symptoms are caused by acid reflux. The testing is the best way to diagnose whether patients who have been found to appear normal through endoscopy have gastroesophageal reflux disease. Recently, new diagnostic equipment has been developed to observe the esophageal pH for 48 hours by attaching a capsule to the esophagus to measure pH without inserting a measuring tube into the esophagus through the nose to measure it, allowing patients to be comfortably tested.

4) Treatment testing by gastric acid secretion inhibitors

It is a way to check whether reflux symptoms improve after administering a high dose of gastric acid secretion inhibitors. It is known to be good for diagnosing reflux esophagitis in medical institutions where it is not feasible to monitor esophageal pH for 24 hours, but the Korean insurance industry does not accept the prescription of high-dose gastric acid secretion inhibitors.

D. Treatment

Currently, three methods are used to treat reflux

esophagitis in hospitals, such as lifestyle correction, drug treatment, and surgery. Most patients are treated with drug treatment first, but surgery may be considered for patients with intractable reflux esophagitis, whose symptoms do not improve even with high-dose drug treatment. Lifestyle correction was considered as the first treatment method in the past, but recently it is recognized as not very important. In fact, it is unclear whether it has the effect of improving already developed gastroesophageal reflux disease, but it is known to have some effect in preventing the recurrence of cured gastroesophageal reflux disease.

Treatment - drug treatment

Gastric acids are the main cause of symptoms and esophagitis among refluxed stomach contents. Therefore, drugs prescribed for the treatment of gastroesophageal reflux disease inhibit the secretion of gastric acids.

Drugs that can control gastric acids include antacids that neutralize gastric acids, histamine receptor antagonists and proton pump inhibitors (PPI) that inhibit the secretion of gastric acids, and potassium competitive acid blockers (P-cabs) that have been relatively recently developed. The inhibitory effect of gastric acid secretion is higher in the order of proton pump inhibitors (PPI) and potassium competitive acid blockers (P-cabs), histamine receptor antagonists, and antacids.

Case

1. Target

The subject of this case study was one patient diagnosed with reflux esophagitis.

1) Name: Baek O O (M/61 years old)

2) Diagnosis: Reflux esophagitis

3) Date of onset: November 21, 2019

4) Treatment period: January 26, 2020 to October 2021 (about 21 months)

5) Chief complaint: He said he suffered a stomachache and pain in the chest shortly after eating and that he felt more comfortable even when he was on an empty stomach. Furthermore, he complained of feeling heavy in the stomach and of continuing to burp after eating.

6) Medical history: He started taking medication for a not-healthy prostate in April 2019.

7) Social history: No smoking and drinking

8) Family medical history: None

9) History of present illness and list of current medications: PPI, prostate medication, and sometimes sleeping pills

2. Methods

<Details of Ortho-Cellular Nutrition Therapy (OCNT)>>

1st Ortho-Cellular Nutrition Therapy (OCNT): Ortho-Cellular Nutrition Therapy (OCNT) was applied to the patient for 6 months from January 26 to July 21, 2020. Also, the patient was recommended to stop taking any medications he had been taking when receiving Ortho-Cellular Nutrition Therapy (OCNT).

The patient was recommended to take Cyaplex X Stick, Eufaplex Stick, and Heartberry Black once daily.

The patient was also asked to take herbal medicine granules to help him digest food.

2nd Ortho-Cellular Nutrition Therapy (OCNT): The patient had about 60% improvement in his symptoms with 1st Ortho-Cellular Nutrition Therapy (OCNT), but instead of Heartberry Black, Bamboo Salt and Notoplex were newly added to improve his mouth dryness and prostate blood flow, respectively.

The patient was recommended to take Cyaplex X Stick, Eufaplex Stick, Notoplex Stick, and Cyaplex Mineral Bamboo Salt once daily.

<Lifestyle management>

The patient was instructed to avoid the intake of fatty foods, coffee, alcohol, spicy foods, carbonated drinks, and floury foods, which can decrease the function of the esophageal sphincter. The patient was informed that eating regular meals that reduce unnecessary gastric acid secretion and maintain a good circadian rhythm while avoiding overeating that secretes a lot of gastric acids helps to improve reflux esophagitis.

The patient was asked to adjust the bed so that his upper body was bent upward about 15 degrees to prevent acid reflux from occurring when going to bed.

The patient was informed that sleeping on the left side, rather than the right side, causes less acid reflux because the stomach is on the left side of the esophagus.

Regular exercise is desirable not only to ensure a regular life but also to maintain a healthy gastroesophageal biorhythm.

However, the patient was advised to avoid strenuous exercise if reflux symptoms became worse.

Results

The patient's esophageal mucosa was severely damaged due to reflux esophagitis that had lasted for a long time (Fig. 1A). After applying 1st Ortho-Cellular Nutrition Therapy (OCNT) for about 6 months, the patient's mucosal condition was checked again through endoscopy, confirming that his symptoms were recovered by about 60% (Fig. 1B). After that, the patient received additional medical treatment for 3 months and then had endoscopy, confirming that his damaged mucosa was completely restored. (Fig. 1C)

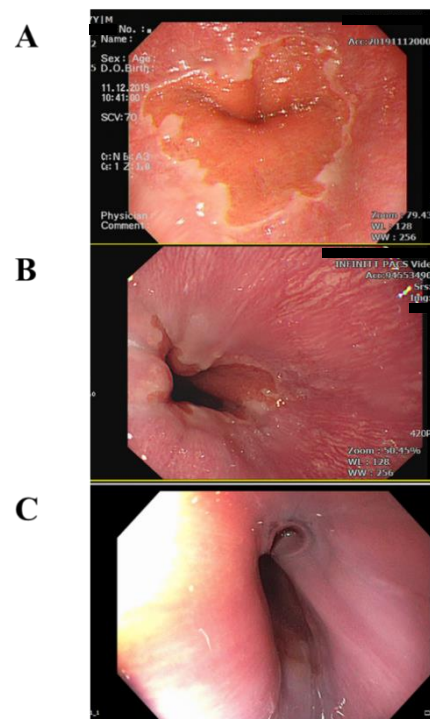


Fig. 1. Endoscopic Pictures of the Esophageal Mucosa of the Patient with Reflux Esophagitis.

(A) An endoscopic picture of the patient before applying Ortho-Cellular Nutrition Therapy (OCNT) on November 12, 2019 (B) An endoscopic picture of the patient showing some improvements after applying Ortho-Cellular Nutrition Therapy (OCNT) for about 6 months on July 28, 2020 (C) An endoscopic picture of the patient who was cured of the disease after applying Ortho-Cellular Nutrition Therapy (OCNT) for a total of about 21 months on November 9, 2021

Considerations

Currently, hospitals prescribe PPI and antacids to patients with reflux esophagitis symptoms in most cases, assuming that the symptoms are caused by hyperacidity. Although reflux esophagitis can be improved with PPI or antacids, there are many cases where the symptoms do not improve and rather become worse even if patients take PPI for a long time, as in the case of the patient of this case study. Reflux esophagitis is not necessarily caused by hyperacidity. Rather, it is assumed that patients with hypochlorhydria are more likely to have reflux esophagitis. The reason is because sufficient gastric acids increase the tension of the esophageal sphincter and prevent it from opening easily, so, in other words, less gastric acid secretion lowers that of the esophageal sphincter, causing the reflux of gastric acids easily. Here is a simple way to tell the difference between hyperacidity and hypochlorhydria. When feeling bloated, belching, and having stomach pain after eating, it is likely to be hypochlorhydria, whereas when feeling bitter on an empty stomach, it is likely to be hyperacidity. The reason is that in the case of hypochlorhydria, the speed at which food is digested slows down, stomach pain occurs due to food that stimulates the stomach wall, and the gas produced therefrom causes bloating and frequent belching. On the other hand, in the case of hyperacidity, food is digested well due to the sufficient secretion of gastric acids, and heartburn occurs due to gastric acids on an empty stomach. The patient did not have esophageal hiatus hernia. Considering the patient's chief complaints, stomach pain, bloating, belching, etc. after eating, it was highly likely that he had hypochlorhydria. However, the patient complained of symptoms aggravated and discomfort due to the intake of PPI and antacids prescribed by a hospital for a long time. The 1st Ortho-Cellular Nutrition Therapy (OCNT) applied to the patient was intended to detoxify him with Cyaplex X, correct his cell membranes with Eufaplex, and improve hypochlorhydria with Heartberry Black.^{1,2,3} The patient complained of pain when urinating after taking the medications for one month and asked if the prescription was causing any side effects. Also, the patient said he wanted to stop receiving Ortho-Cellular Nutrition Therapy (OCNT). However, a separate procedure was carried out to persuade the patient by telling him that Cyaplex X and Eufaplex could improve the condition of his underlying disease for prostate because they can detoxify cells throughout the body.

And the patient said that his stomach pain was relieved by about 50%, and he no longer felt pain when urinating after taking the medications for two months. Since then, the patient's stomach pain had generally improved, confirming that his symptom had improved by about 60% through endoscopy on July 28. However, the patient complained of mouth dryness after 6 months. So, the prescription was changed to Notoplex4 and Bamboo Salt5 to replenish body fluids and improve the prostate blood flow. With the improvement of reflux esophagitis, the patient did not feel any discomfort even though he stopped taking both the prostate medicine and sleeping pills. Ortho-Cellular Nutrition Therapy (OCNT) has the advantage of being excellent in improving a variety of symptoms at the same time because it detoxifies the cells in the body with Cyaplex and corrects the cell membranes of the whole body with Eufaplex.^{1,2} Reflux esophagitis is thought to be further caused by the oxidation and degeneration of the lower esophageal sphincter. It is considered that reflux esophagitis, caused by the oxidation and degeneration of muscle cells that make up the esophageal sphincter, which interferes with sphincter contraction and relaxation, cannot be improved with PPI or antacids. As this case study is based on a single instance of data, it cannot be applied universally to all patients, but it is thought to be a case of making an excellent contribution to improving the function of degenerated and oxidized esophageal sphincter cells through Ortho-Cellular Nutrition Therapy (OCNT). Therefore, this case study is reported with the patient's prior consent.

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