Optimal Access to Medical Information Management for the Treatment of Patients with Reflux Esophagitis

Seong-Ran Lee
Dept. of Medical Information, Kongju National University
e-mail:leesr@kongju.ac.kr

역류성 식도염 환자들의 치료를 위한 최적의 의료정보관리 접근

이성란
공주대학교 의료정보학과

Abstract

This study is an optimal approach to medical information management for the treatment of patients with reflux esophagitis. This study conducted a survey and interview with 62 patients who visited the internal medicine department of a general hospital in K area from May 3 through July 13, 2022. Before and after the medical information experiment, the t-test was used. The results of this study are as follows. Firstly, chestburn decreased significantly after application compared to before medical information management was applied(t=3.75, p<.01). Secondly, feeling foreign body decreased after 14 days compared to before the experiment and increased again after 21 days. Therefore, the results were confirmed that medical information management applied in this study were effective.

1. lntroduction

Reflux esophagitis is an inflammation of the esophagus caused by the reflux of stomach contents or stomach acid into the esophagus. Patients with reflux esophagitis have quadrupled in the last eight years. Causes of esophagitis include cancer, long-term gastric intubation, intake of stimulants, uremia, bacteremia, and antibiotics. Reflux esophagitis is a disease that one in ten Koreans suffer from[1]. If left unattended, it can develop laryngitis and esophageal cancer. Reflux esophagitis is a symptom of reflux of the bite along with repeated heartburn in the lower chest. Reflux esophagitis can cause complications such as ulcers and bleeding. Intervention of health information management is needed to treat reflux esophagitis[2],[3].

Therefore, this study is an optimal approach to medical information management for the treatment of patients with reflux esophagitis.

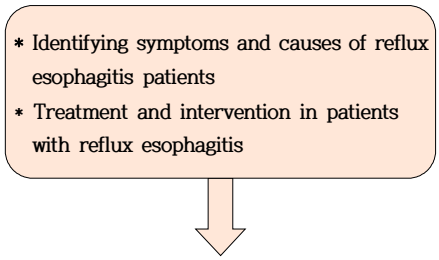
2. Materials and Methods

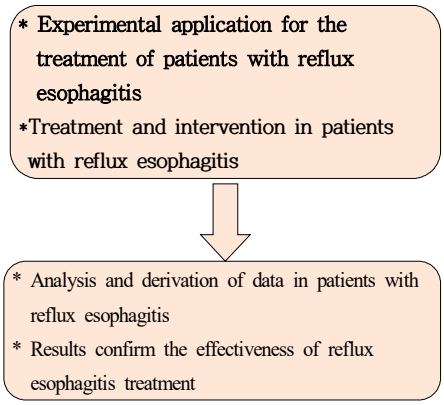
2.1 Materials

This study conducted a survey and interview with 62 patients who visited the internal medicine department of a general hospital in K area from May 3 through July 13, 2022

2.2 Methods

Before and after the medical information experiment, the t-test was used. The effect of applying medical information management was measured on 7, 14, 21, and 28 days before and after applying medical information[Figure 1].





[Fig. 1] Conceptual Model for the Treatment of Reflux Esophagitis

3. Results

3.1 Changes Before and After the Medical Information Management Experiment

Table 1 presents changes before and after the medical information management application experiment. Chestburn decreased significantly after application compared to before medical information management was applied(t=3.75, p<.01). Hot food intake decreased significantly after application compared to before medical information was applied(t=5.81, p<.01)

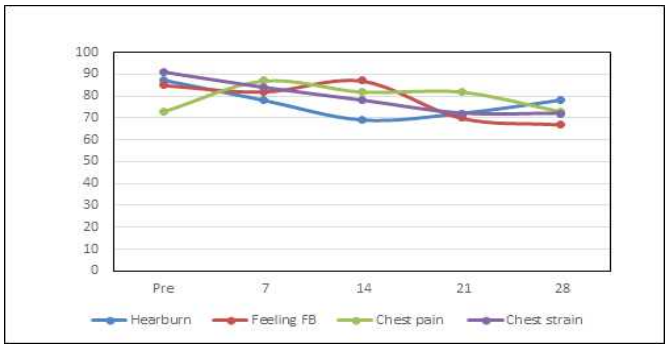
[Table 1] Changes Before and After the Medical Information Experiment

Variables	Pre	Post	t
Symptoms			
heartburn	51.32±1.35	36.48±1.92	3.75**
Feeling foreign body in the neck.	39.14±3.82	21.25±3.75	1.59*
Change of voice	32.07±5.49	28.13±4.18	4.62
Chest pain	29.94±0.62	22.58±0.73	1.94
Chest strain	47.18±3.62	25.01±1.74	5.47*
Frequent sintering	50.49±1.78	42.85±1.92	2.97*
Treatment			
Consumption of greasy food	54.19±3.82	39.11±2.84	6.19*
Eating right before bed.	43.62±5.17	24.57±4.19	3.47*
Eating hot food	56.35±0.43	31.92±0.62	5.81**
Carbonated drink,	51.49±2.61	29.36±2.49	1.47**
Overeating	46.20±1.35	35.81±1.62	4.15
Jogging	29.17±0.46	52.39±0.78	-2.39**

* p<.05 ** p<.01

3.2 Time-Dependent Changes in Reflux Esophagitis Symptoms

Figure 2 shows the change over time of reflux esophagitis symptoms. Heartburn continued to decrease significantly after 7 days than before the experiment. Feeling foreign body decreased after 14 days compared to before the experiment and increased again after 21 days.



[Fig. 2] Time-dependent changes in reflux esophagitis symptoms

4. Discussion

As a result, hot food intake decreased significantly after application than before medical information was applied. This was found to be similar to the study of esophageal cancer in previous studies[3],[4]. Hot food intake increases the incidence of reflux esophagitis by stimulating the walls of the esophagus.

Heartburn decreased significantly after application compared to before medical information was applied. It was found to be similar to the study of stomach cancer in previous studies[5],[6]. Reflux esophagitis can cause heartburn by refluxing stomach acid into the esophagus. There are symptoms of repeated soreness in the lower chest and reflux of the bite. Persistent or severe heartburn is a sign of severe inflammation or ulcer in the gastric mucosa. Patients should eat a variety of nutrients with a balanced diet.

Therefore, the results were confirmed that medical information management applied in this study were effective. The research derived from this study is expected to contribute to alleviating reflux esophagitis.

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