Title:
The Effect of Elevating Head of Bed for Esophageal Cancer Patients With Nocturnal Reflux Symptom

Hui-Chen Huang, BSN
BSN, RN, NP, National Cheng Kung University Hospital, and Graduate Student, Cheng Kung University, Tainan, Taiwan
Su-Ying Fang, PhD
Department of Nursing, National Cheng Kung University, Tainan, Taiwan

Session Title:
Evidence-Based Practice Poster Session 1
Slot (superslotted):
EBP PST 1: Friday, 28 July 2017: 10:00 AM-10:45 AM
Slot (superslotted):
EBP PST 1: Friday, 28 July 2017: 12:00 PM-1:30 PM

Keywords:
esophagectomy and reconstruction, gastro-esophagus reflux and wedge form pillow

References:


Abstract Summary:
The preliminary results of this study revealed that using wedge form pillow may improve the symptoms of gastro-esophagus reflux. If this management can decrease the time of reconstructed esophagus exposing in acid environment nocturnally, it can improve the patients' reflux syndrome and then improved their quality of life.

Learning Activity:

<table>
<thead>
<tr>
<th>LEARNING OBJECTIVES</th>
<th>EXPANDED CONTENT OUTLINE</th>
</tr>
</thead>
<tbody>
<tr>
<td>The mechanism of elevating head of bed on reflux syndrome</td>
<td>The way and principle of using the wedge foam pillow to elevate the head of bed.</td>
</tr>
<tr>
<td>The learner will be able to understand the effect of elevating head of bed for patients with esophageal cancer suffered from nocturnal reflux symptom after esophagectomy and reconstruction</td>
<td>The common symptom that we need to assess the reflux syndrome.</td>
</tr>
</tbody>
</table>

Abstract Text:

Background:
It has been demonstrated that elevating head of bed nocturnally can improve the symptoms of gastro-esophageal reflux disease by the mechanism of gravity to increase the clearance rate of removing acid-base digestion fluid. Our study base on this theory and previous researches to examine the effect of elevating head of bed for patients with esophageal cancer suffered from nocturnal reflux symptom after esophagectomy and reconstruction.

**Purpose:**

The purpose of this study was to understand the effect of elevating head of bed by using the wedge form pillow on the gastro-esophageal reflux symptoms among patients receiving esophagectomy and reconstruction during the period of 14 days.

**Methods:**

Cross-over design and block randomization was used in this study. First group were treated with proton pump inhibitors (PPI) at the first seven days, and started to use wedge form pillow combined with PPI using during eight to fourteen days. The second group used wedge form pillow and PPI at the first seven days and remove wedge form pillow and only use PPI during the second week. We used the questionnaire of The Dysfunction after Upper Gastrointestinal Surgery Cancer (DAUGS32) to follow their reflux symptoms by using telephone contact on 1st, 2nd, 3rd, 5th, 7th and 8th, 9th, 10th, 12th, 14th day.

Inclusion criteria were above twenty years old, had been confirmed the diagnosis of esophagus cancer and finished total esophagus resection, gastric tube reconstruction and cervical anastomosis at least two months. If adjuvant radiotherapy and chemotherapy were intervened, we started the trial at least three months after operation. Participants who used materials other than gastric tube for esophagus reconstruction, accepted pyloroplasty or combined with others malignant tumor or recurrent status were excluded.

**Result:**

Thirteen patients were recruited until now in which 7 were assigned to first group and 6 were in the second group. We used multiple mixed effect model to evaluate the improvement of symptoms of GERD. It had a significant effect (p=0.034) on the improvement of GERD symptoms in the first group while the period used wedge form pillow combined with PPI than the period treated only with medication. However, it did not show significant difference in the second group between wedge form pillow combined with PPI and PPI used alone (p=0.054). As a result of small sample size, we need to recruit more participants to .

**Expect Result:**

The preliminary results of this study revealed that using wedge form pillow may improve the symptoms of gastro-esophagus reflux. We will keep follow the symptoms of all participants for at least three months and continue to recruit more patients into this study. If this management can decrease the time of reconstructed esophagus exposing in acid environment nocturnally, it can improve the patients’ sleeping disorder and elevate their quality of life.