Evaluation of Home Tube Feeding for the Esophagectomy Patient in the Homecare Setting: Considerations for Patients Without Adequate Insurance Coverage

Cynthia Reddick, RD, CNSC | Janelle Flaherty, RD, CD, CNSC

Introduction

Limited information exists about the typical journey of the post-esophagectomy patient on home tube feeding (HTF), including typical length of need. This information is important in the education of both these patients and the acute care clinicians who prepare them for discharge home on J-tube feeds. This is because there is potential for financial impact to the patient if HTF therapy is not covered by insurance. Some payers, specifically Medicare Part B, have guidelines for tube feeding coverage that require the patient to have a “permanent impairment” — defined as having the condition for a period of greater than 90 days — and require that tube feeding be the primary source of nutrition during that time period. Therefore, many esophagectomy patients aged 65 years or older who rely solely on Medicare benefits may not have insurance coverage for their HTF formula and supplies.

Understanding the typical journey for post-esophagectomy patients on HTF — including feeding regimen, formula prescribed, and length of therapy — could help patients without insurance coverage for HTF therapy prepare to manage the financial and clinical aspects of this important post-esophagectomy home therapy.

Methods

A retrospective medical chart review was performed of the status of 18 esophageal cancer patients post-esophagectomy and post-placement of a J-tube for tube feeding. The study group included adult patients from one homecare provider who were initiated on HTF from May 2013 to June 2014.

Data reviewed and evaluated included the following:

- Age
- Gender
- Formula type
- Feeding regimen
- Calorie provision
- Percentage of calorie needs met from tube feeding based on assessment by a hospital Registered Dietitian (RD)
- Number of days between procedure date and initiation of J-tube feeds in the hospital
- Number of days between initiation of feeds in the hospital and at home
- Number of days on HTF

Results

These results illustrate the study population demographic, and the patients’ journey from point of esophagectomy through the end of HTF therapy at home.

Table 1. Patient Age and Gender

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Patients</td>
<td>13</td>
<td>5</td>
</tr>
<tr>
<td>Age Range</td>
<td>46.75</td>
<td>62.75</td>
</tr>
<tr>
<td>Mean Age</td>
<td>68</td>
<td>68</td>
</tr>
</tbody>
</table>

Table 2. HTF Regimen

<table>
<thead>
<tr>
<th>Quick Stats</th>
<th>Feeding Rate Range</th>
<th>Feeding Cycle Range</th>
<th>Average Calories/Protein</th>
<th>Average Kcal/kg</th>
<th>Average % Calories Needs Met</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>50-140 mL/h</td>
<td>10-24 hours/day</td>
<td>1,519</td>
<td>25.3</td>
<td>69%</td>
</tr>
</tbody>
</table>

The average length of time between the esophagectomy procedure date (PD) and initiation of J-tube feeds in the hospital was 2.2 days. HTF began an average of 6.8 days after the initiation of feeds in the hospital (see Chart 1).

Of the 18 patients studied in this review, 16 had uncomplicated esophagectomies. The remaining two suffered complications from an anastomotic leak (see Chart 2).

Chart 1. Time to Initiation of Tube Feeding

The average length of HTF therapy for 16 of the 18 patients was 49.6 days. The remaining two patients encountered a complication of anastomotic leak, resulting in an average HTF therapy length of 309 days (see Chart 3).

Chart 2. Status of Patient Surgeries

Chart 3. Average Number of Days on HTF

Conclusions

In this study, the esophagectomy patient’s journey from surgery and J-tube placement to graduation off of tube feeding was a fairly predictable process when not complicated by an anastomotic leak or other post-surgical complication. Oral diet was typically initiated prior to discharge from the hospital and graduated toward sole source nutrition while J-tube feeding was weaned toward discontinuation and tube removal.

The results of this study suggest that esophagectomy patients without surgical complications can return to 100% oral intake in less than two months following surgery. This knowledge of a potential HTF timeframe could help patients without insurance coverage for HTF to make more informed decisions regarding their therapy options and allow them to plan more carefully according to their personal financial constraints. In addition, our results show that the patients studied tolerated intact protein formula with or without fiber at rates up to 140 mL/hour on a cycled or continuous regimen. This suggests that use of this type of regimen, which is much more affordable than the alternative — a peptide regimen — could significantly lessen the cost burden to the patient who does not have insurance coverage for their HTF.

Chart 4 illustrates that most patients tolerated a standard formula via their J-tube after esophagectomy. This is key information — particularly for patients who have a share of cost or who have to self-pay for the therapy due to non-coverage by their insurance — because standard formulas are much less expensive than peptide-based formulas.

Chart 5 illustrates the progression of oral diet post-esophagectomy. At the point of hospital discharge — which was an average of 9 days after surgery — 83% of the study population was progressing on their oral diet.