The impact of oesophageal stents on nutritional status and dietary intake in oesophageal cancer patients

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Background

• Patients requiring oesophageal stenting generally present with significant weight loss and dysphagia.\(^1\)

• Oesophageal stents have been shown to be effective in improving symptoms of dysphagia with two-thirds of patients treated with a stent able to eat solids initially.\(^2\)

• However, their overall success has been questioned with dysphagia worse in 10% of patients and late complications in up to 25% of patients.\(^3\)
Dietetic support at GSTT for Oesophageal Stents

Pre stent insertion dietetic counselling (outpatient or inpatient setting)

Dietetic counselling within approximately 48 hours following stent insertion (inpatient setting)

Telephone review 1 week post stent insertion

Face to face dietetic review when next returning to clinic
Aim

• To determine the incidence of persisting nutritional difficulties following oesophageal stent insertion in patients with oesophageal cancer
Methods

• Adults with oesophageal cancer admitted to Guys Hospital who received an oesophageal stent between March 2015 and August 2015

• Dietetic assessment pre-stent insertion, 1 week, 1 month and 3 months post stent insertion.

• Information recorded
  • Weight
  • BMI
  • percentage weight loss
  • type of nutritional support
  • dietary texture
  • Nutrition impact symptoms (including pain, nausea, vomiting, regurgitation and reflux)
Population studied

• 18 patients received an oesophageal stent during the study period
• 15 were male and 3 female with a median age of 68.5 years
• 14 patients were being managed with palliative intent and 4 with curative intent
• 3 patients died within 1 month and an additional 7 within 3 months of having the stent placed
# Nutritional changes post stent insertion

<table>
<thead>
<tr>
<th>Time</th>
<th>Weight (kg) (median)</th>
<th>BMI (kg/m2) (median)</th>
<th>Weight loss (%) (median)</th>
<th>Nutritional intake</th>
<th>Dietary texture</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Oral</td>
<td>Enteral</td>
</tr>
<tr>
<td>Pre-stent n=18</td>
<td>68.2</td>
<td>24.6</td>
<td>N/A</td>
<td>16</td>
<td>2</td>
</tr>
<tr>
<td>1 week post stent n=18</td>
<td>68.8</td>
<td>24.8</td>
<td>0.0</td>
<td>18</td>
<td>0</td>
</tr>
<tr>
<td>1 month post stent n=15</td>
<td>67.3</td>
<td>24.7</td>
<td>3.7</td>
<td>15</td>
<td>0</td>
</tr>
<tr>
<td>3 months post stent n=8</td>
<td>55.9</td>
<td>21</td>
<td>4.3</td>
<td>8</td>
<td>0</td>
</tr>
</tbody>
</table>
## Nutrition Impact Symptoms

<table>
<thead>
<tr>
<th>Symptoms</th>
<th>Pre Stent</th>
<th>1 Week</th>
<th>1 Month</th>
<th>3 Months</th>
</tr>
</thead>
<tbody>
<tr>
<td>Odynophagia</td>
<td>1/18 (6%)</td>
<td>8/18 (44%)</td>
<td>3/15 (20%)</td>
<td>3/8 (38%)</td>
</tr>
<tr>
<td>Nausea, vomiting, regurgitation + reflux</td>
<td>12/18 (67%)</td>
<td>6/18 (33%)</td>
<td>5/15 (67%)</td>
<td>5/8 (63%)</td>
</tr>
</tbody>
</table>
The observed impact on oesophageal stent insertion on oesophageal cancer patients

• Reduced the reliance on liquid diets and enteral tube feeding
• Improved the variety of textures patients were able to swallow which may potentially assist with a better quality of life
• Nutritional indices (BMI and weight) decreased following stent insertion

• Our Goal: Improve quality of life
Final Thoughts

• Consider quality of life questionnaire
• Small sample size

Deciding on insertion of an oesophageal stent should be made on an individual basis and should include discussion around the benefits and potential complications of this intervention.
References


