Role of Training and Evaluating Self-Care Ability in Laryngectomy Population

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DISCLOSURES

Financial Relationships:
• VA Salary

Non-financial Relationships:
• I have no non-financial relationships to disclose

OBJECTIVES

• Participants will summarize the roles of SLP in the care of a TL
• Participants will be able to outline risk factors for readmission in the TL population
• Participants will be able to generate a clinical education process for training self-care post TL
ROLE OF SLP IN CARE OF TL

- Pre-operative Assessment/Counseling
- Post-op Education
  - Training for Stoma Care
  - Reestablish Communication
- Swallowing Assistance
- Staff/Family Education

PRE-OP COUNSELING & EDUCATION

- TL Sequelae: physical, anatomical, emotional, psychological, and communication
- TL Pre-Operative Counseling & Education
  - 1970s-present
  - 2016 Systematic review concluded many studies were flawed and existing evidence was weak (Fitzgerald & Perry)

PRE-OP COUNSELING & EDUCATION

- Shenson et al. (2017) retrospectively observed decreased LOS in a cohort that received pre-operative counseling vs. no counseling
  - No difference for ED presentation or readmission rate
- Published TL unplanned 30-day readmission rates range from 12-40% (Hernandez et al., 2017, Grabynen et al., 2014, Goepfert et al., 2016)
Graboyes et al. (2014) reported stomal and TEP complications were the most common reason for ED presentation post-discharge.

- 8% readmission rate for stomal or TEP complication after implementation of a comprehensive, preoperative education program (Graboyes et al., 2017).

**RE-ADMISSION RELATED TO SELF-CARE**

- Insufficient skills and experience of staff caring for surgical airways may:
  - Result in suboptimal care and increased morbidity.
  - Patients may benefit from the expertise of a variety of professionals for optimal management.
  - Multidisciplinary teams are becoming more widespread in national and international settings.

**AIRWAY TEAM**

- Insufficient skills and experience of staff caring for surgical airways may:
  - Result in suboptimal care and increased morbidity.
  - Patients may benefit from the expertise of a variety of professionals for optimal management.
  - Multidisciplinary teams are becoming more widespread in national and international settings.

**MAINTAIN ADEQUATE OXYGENATION**

**SECRETION MANAGEMENT WITH PRN SUCTION**

**OBTAIN HEALED STOMA SITE**

**ACHIEVE-MAINTAIN MOBILE SECRETIONS**

**INDEPENDENT SELF-CARE**

**REESTABLISH COMMUNICATION**

**DISCHARGE EDUCATION/SUPPLIES**
VAPHS: QI project for total laryngectomy pre- & post-operative education and training process

METHODS
- Retrospective review of Veterans undergoing TL since June 2010

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Patients, Number [%]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age, years, mean (range)</td>
<td>67.2 (54-85)</td>
</tr>
<tr>
<td>Sex</td>
<td>Male: 58 (90)</td>
</tr>
<tr>
<td>Diagnosis</td>
<td>Larynx or Hypopharynx SCC: 52 (90)</td>
</tr>
<tr>
<td></td>
<td>Dysphagia, dysarthria: 3 (2)</td>
</tr>
<tr>
<td></td>
<td>Vocal fold, larynx, or neck: 2 (3)</td>
</tr>
<tr>
<td></td>
<td>Pulmonary: 26 (47)</td>
</tr>
<tr>
<td></td>
<td>Neurology: 10 (18)</td>
</tr>
<tr>
<td></td>
<td>Mental health: 24 (47)</td>
</tr>
<tr>
<td></td>
<td>Complications, reoperations, or mortality: 10 (18)</td>
</tr>
</tbody>
</table>

| Primary Predisone | 5 (8) |
| Iraq: 3 (5) |
| Afghanistan: 1 (2) |
| Other: 0 (0) |

INTERVENTIONS
- Pre-operative education & counseling: 91% (50/55)
- Post-operative daily multidisciplinary training
  - Speech Pathology
  - Nursing
  - Respiratory
  - ENT
- Early identification of patients needing extra support
- Utilization of short-stay rehab
WRITTEN EXAM

- Passing Score: 85%+

HANDS-ON DEMONSTRATION

DISCHARGE PLANNING

- Goal: Return to previous living situation
  - Home
  - Community Living Center for additional training or long term care
    - H.J. Heinz Campus
    - Outside VA
OUTCOMES: WRITTEN EXAM RESULTS

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Patients, Number (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pass</td>
<td>41 (76)</td>
</tr>
<tr>
<td>Fail</td>
<td>13 (24)</td>
</tr>
<tr>
<td>Passed re-examination</td>
<td>4 (7)</td>
</tr>
<tr>
<td>Not administered re-examination</td>
<td>3 (6)</td>
</tr>
<tr>
<td>Assumed fail due to cognitive state</td>
<td>6 (11)</td>
</tr>
</tbody>
</table>

- All patients who failed the written exam received additional hands-on training and education prior to discharge.

OUTCOMES: SELF-CARE

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Patients, Number (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED visit within 30 days due to self-care deficiency</td>
<td>2 (4)</td>
</tr>
<tr>
<td>Readmission within 30 days due to self-care deficiency</td>
<td>2 (4)</td>
</tr>
</tbody>
</table>

- Self-care readmissions occurred in 2011 and 2015.

SELF-CARE OUTCOMES

- Fall of 2015: began administering cognitive-screenings and using HJH campus for short-stay rehab.
H.J. HEINZ (SHORT-STAY REHAB)

- Community Living Center
- Annual and “Just-in-Time” Trainings for all staff
- Surgical Airway Team:
  - Speech Pathology, Respiratory Therapy, Geriatrics, Nursing
- Weekly bedside rounds to:
  - Discuss progress/barriers to self-care
  - Solve problems collaboratively
  - Generate appropriate discharge options

SELF-CARE OUTCOMES

- VAPHIS’s readmission rate related to self-care deficiency in the TL population has been low (4%)
- A comprehensive, multidisciplinary pre- and post-operative TL education program that includes pre-discharge skills assessment is viable

CONCLUSIONS
SUMMARY

• Hospitals with low volumes of TL procedures can have positive outcomes.

• A comprehensive, multidisciplinary pre- and post-operative TL education program that includes pre-discharge skills assessment may reduce readmission rates in the TL population.

• Optimal utilization of discharge resources may also be a key to reducing post-discharge ED visits and readmissions.

REFERENCES


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