Baseline Characteristics for Consideration of Prophylactic Feeding Tube Placement in Persons Undergoing Chemoradiotherapy for Head and Neck Cancer: A Retrospective Chart Review

Amy Beltz
Amy.Beltz@lvhn.org

Janine Gilboy RD, LDN
Lehigh Valley Health Network, Janine.Gilboy@lvhn.org

Erin Levine RD, CSO, LDN
Lehigh Valley Health Network, Erin.Levine@lvhn.org

Brian J. Patson MD
Lehigh Valley Health Network, brian_j.patson@lvhn.org

Jennifer Brennan RD, CSO
Lehigh Valley Health Network, Jennifer.Brennan@lvhn.org

Follow this and additional works at: https://scholarlyworks.lvhn.org/research-scholars-posters

Published In/Presented At
Baseline Characteristics for Consideration of Prophylactic Feeding Tube Placement in Persons Undergoing Chemoradiotherapy for Head and Neck Cancer: A Retrospective Chart Review

Amy Beltz, Janine Gilboy, RD, CSO, LDN, Erin Levine, RD, CSO, LDN, Brian Patson, MD, Jennifer Brennan, MS, RD, CSO, LDN

Cancer Support Services
Lehigh Valley Health Network, Allentown, Pennsylvania

Background

- There is currently no standard protocol for clinicians to follow when deciding whether or not to place a prophylactic feeding tube (PFT) in patients with head and neck cancer (HNC).
- Because of the risks involved in having a PFT placed, such as reduced swallowing function, clinicians need a definite guideline to follow when deciding if a patient will benefit from a PFT.

Objective

This retrospective chart review will seek to identify baseline characteristics of patients who will likely benefit from having a feeding tube (FT) placed prophylactically rather than reactively. Factors such as age, baseline BMI, pretreatment weight loss, ECOG score, tumor location, presence of dysphagia, nodal (N) status, tumor (T) status, and chemotherapy regimen will be evaluated. Patient outcomes, such as treatment completion, breaks in treatment, hospital admissions, weight loss, and FT usage at the end of treatment will be evaluated to determine if FT placement resulted in improved patient outcomes.

Methods

- LVHN patient database searched for patients diagnosed with head and neck cancer between the years 2016-2019.
- Other relevant patient characteristics, such as gender, age, ethnicity, nodal involvement, and tumor location were also entered into RedCap.
- Weight loss in pounds and percentages at various intervals during and post treatment documented using RedCap data collection tool.
- Statistical analysis performed by biostatisticians comparing those that did not receive a PFT and those that did.

Results

- The final sample size is n=62. No results of this study reached statistical significance because of the small sample size.
- Of the 62 patients that were included in the study, 71%(44) had a PFT placed. Of the patients that did not receive a PFT, 17%(3) had a FT placed reactively.
- Demographics: The results of this study indicate that the incidence of HNC is disproportionately high in those of the male gender(83.9%), in past and current smokers (79%) and in White/Caucasian patients (91.9%).

Discussion

This study had several limitations that reduces the generalizability and scope. 1) The small sample size of this study made it difficult to obtain statistically significant results. 2) Generalizability of this study is small because it is a single center study that reviewed a population of limited diversity. 3) While the strict inclusion criteria (Stage III or IV HNC receiving CRT with a curative intent) of this study allowed for a high degree of specificity, it further limited generalizability.

Conclusions and Future Directions

The results of this preliminary study indicate that a lower initial BMI, a higher tumor status, experiencing pretreatment dysphagia, and type of chemotherapy used are baseline characteristics used to determine placement of a PFT. However, given the small sample size of this study, further research may find that the other factors mentioned in the study, such as nodal involvement and age, are also linked to the placement of a PFT. This study also looked at how having a PFT placed impacts treatment and patient outcomes. While it did not find that having a PFT placed had a significant impact on treatment completion, it did reduce weight loss during treatment, which indicates improved nutritional status. Also, it does not appear that the majority of patients used their FT for longer than the 3-4 month follow up. This study will be continued with a larger sample size in order to yield statistically significant results. One aspect that is in much of the literature that was not captured in our study is to what extent the patient uses the FT to meet their nutritional needs. This would be interesting data to capture in the future.

References