

Title:

Improving Pre-operative Emotional Distress Shortens Hospitalization for Esophagectomy

Preferred presentation:

Oral or poster

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## Background

Pre-operative emotional distress – characterized by anxiety, depression, and/or psychological stress – is commonly experienced by patients diagnosed with esophageal cancer. Previous studies have observed that emotional distress is associated with longer hospital length of stays (LOS) in various cancer populations, including esophageal cancer. However, the impact of changes in emotional distress during the pre-operative period on post-operative LOS remain unclear. This exploratory study aims to test whether improvements in pre-operative emotional distress influence post-esophagectomy LOS.

## Methods

We conducted a retrospective analysis using data collected from a high volume North American tertiary care referral centre. Eligible participants completed the Functional Assessment of Cancer Therapy-Esophageal (FACT-E) at (1) diagnosis and (2) prior to esophagectomy. Emotional distress was measured using the FACT-E Emotional Well-Being (EWB) subscale. Changes in EWB scores between the two time points were categorized as “improved” or “unimproved” (i.e., stable or decreased). The Mann-Whitney U test was used to test the associations between LOS and the “improved” / “unimproved” EWB category.

## Results

Of the 106 participants that completed the FACT-E at both time points and had an LOS related to esophagectomy, 67 (63%) were categorized as “improved”. Those in the “improved” category experienced an average increase of 5.1 points in the EWB subscale score. The “improved” group had an average LOS of 9.2 days compared to 10.4 days for the “unimproved” group ( $p < 0.05$ ).

## Conclusion

Improvements in EWB score – used as a proxy for emotional distress – during the pre-operative period was associated with shorter postoperative LOS for esophageal cancer patients. The average difference was more than a full day. This suggests that emotional distress, if improved, can directly influence early outcomes and post-esophagectomy recovery. Future research should investigate the impact of pre-operative psychological assessments and interventions to better understand emotional distress as a modifiable risk factor for esophagectomy outcomes.