Assessment of Critical Steps in Hiatal Hernia Repair Using YouTube Videos

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Introduction

The "10 Critical Steps of Hiatal Hernia Repair and Anti-Reflux Surgery" by Tyle et al. was published to provide a framework for standardization of benign hiatal hernia repairs.

Objective: To determine if currently available educational videos on YouTube adequately detail the 10 critical steps.

Methods

- **Video Search**: YouTube videos of elective, benign foregut surgeries in adults in English published between January 1, 2019 and July 1, 2024 were identified.
- **Video Review Process:** Two reviewer pairs independently assessed the videos for the demonstration and description of the 10 critical steps. Steps were classified as described, shown, both, or neither.
- **Data Captured:** Publication date, video views, shown operative video length.
- **Statistical analysis:** chi-square analysis, p-value < 0.005 indicated significance. Correlation analysis between video length and step presentation as well as video views and step presentation.

Results

39 Videos Reviewed

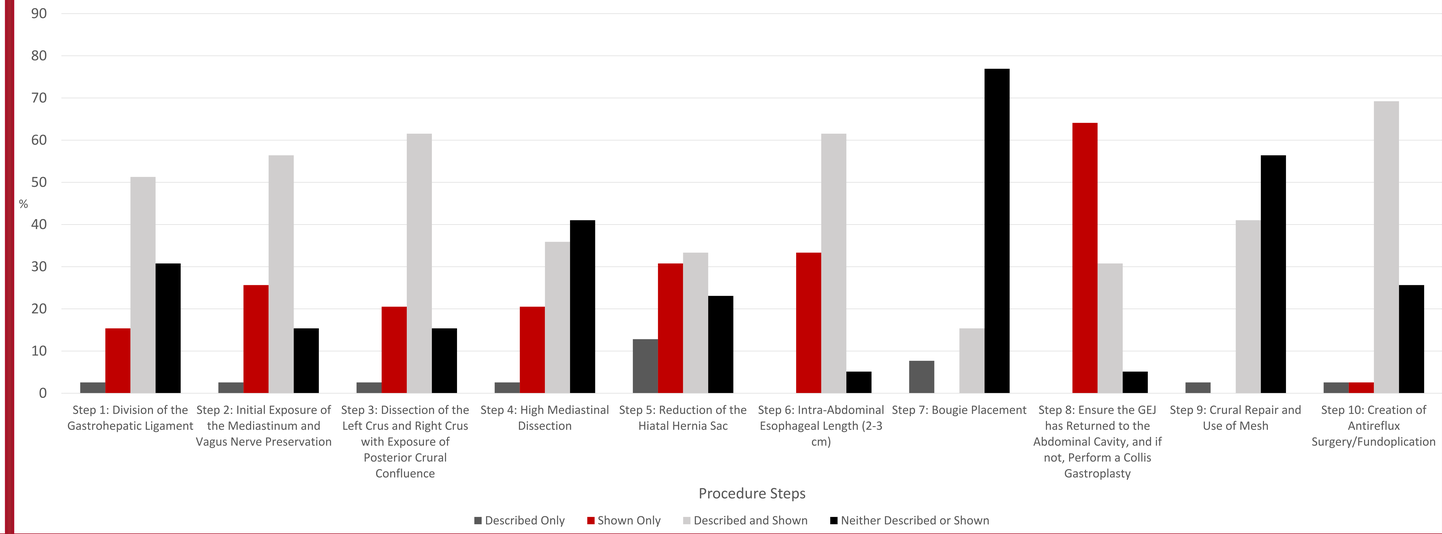
3 Videos (8%) described and/or showed all 10 steps

Described and Shown
Step 3 (62%)
Step 6 (62%)
Step 10 (69%)

Neither Described nor Shown
Step 7 (77%)
Step 9 (56%)

Described but not Shown
Step 8 (64%)

Figure 1. Classification and Frequency of Hiatal Hernia Repair Steps: Percentage of Steps per Video Described, Shown, Both or Neither



Results, cont.

Positive Correlation:
Operative video length vs. steps described and shown (r = 0.24).

Negative Correlation:
Operative video length vs. videos omitted at least one step (r = -0.4).

No significant correlation between video views and steps described and/or shown.

Conclusions

The results of our study highlight the need for standardizing online hiatal hernia repair and anti-reflux surgery educational videos. We recommend updating currently available educational materials to be consistent with expert guidelines.

Disclosures

The authors have no financial disclosures or conflicts of interest to report related to this study.