

INTRODUCTION

- Presbylarynx is a common age-related cause of glottic insufficiency¹.
- Patients may present with cough, throat clearing, globus sensation, dysphagia, and voice complaints¹⁻³.
- Injection medialization laryngoplasty (IML) is commonly used to improve glottic closure and voice outcomes⁴.
- Its impact on cough, dysphagia, and other throat-related symptoms remains incompletely understood.

OBJECTIVE

To evaluate the effect of temporary bilateral injection medialization laryngoplasty on patient-reported throat symptoms in adults ≥60 years and older with presbylarynx.

METHODS

- Retrospective observational review
 - Academic voice & swallowing center between
 - 2013 - 2021
- Inclusion Criteria:**
- Age ≥60 years
 - Presbylarynx on videostroboscopy
 - Temporary bilateral vocal fold injection augmentation
 - Available pre- and post-procedure PROMs

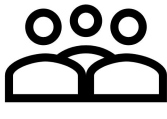
Outcome Measures:

- VHI-10⁵
- RSI⁶
- CSI⁷
- EAT-10⁸

Statistical Analysis:

- Paired t-tests; Wilcoxon signed-rank tests
- ANOVA; Independent t-tests; Pearson correlations
- $\alpha = 0.05$ (two-tailed)

PATIENT CHARACTERISTICS (N=160)

 Age, mean ± SD (years)	74.3 ± 7.5
 Male, n (%)	86 (53.8%)
 Female, n (%)	74 (46.3%)
 Dysphagia at baseline, n (%)	87 (54.4%)
 GERD, n (%)	82 (51.2%)
 Smoking history, n (%)	62 (38.8%)
 Follow-up interval, mean, ± SD (days)	53.4 ± 23.5

RESULTS

- **Patients with abnormal baseline symptoms demonstrated the greatest clinical improvement**

Figure 1. Percent of Patients who Improved in Abnormal Baseline Symptoms

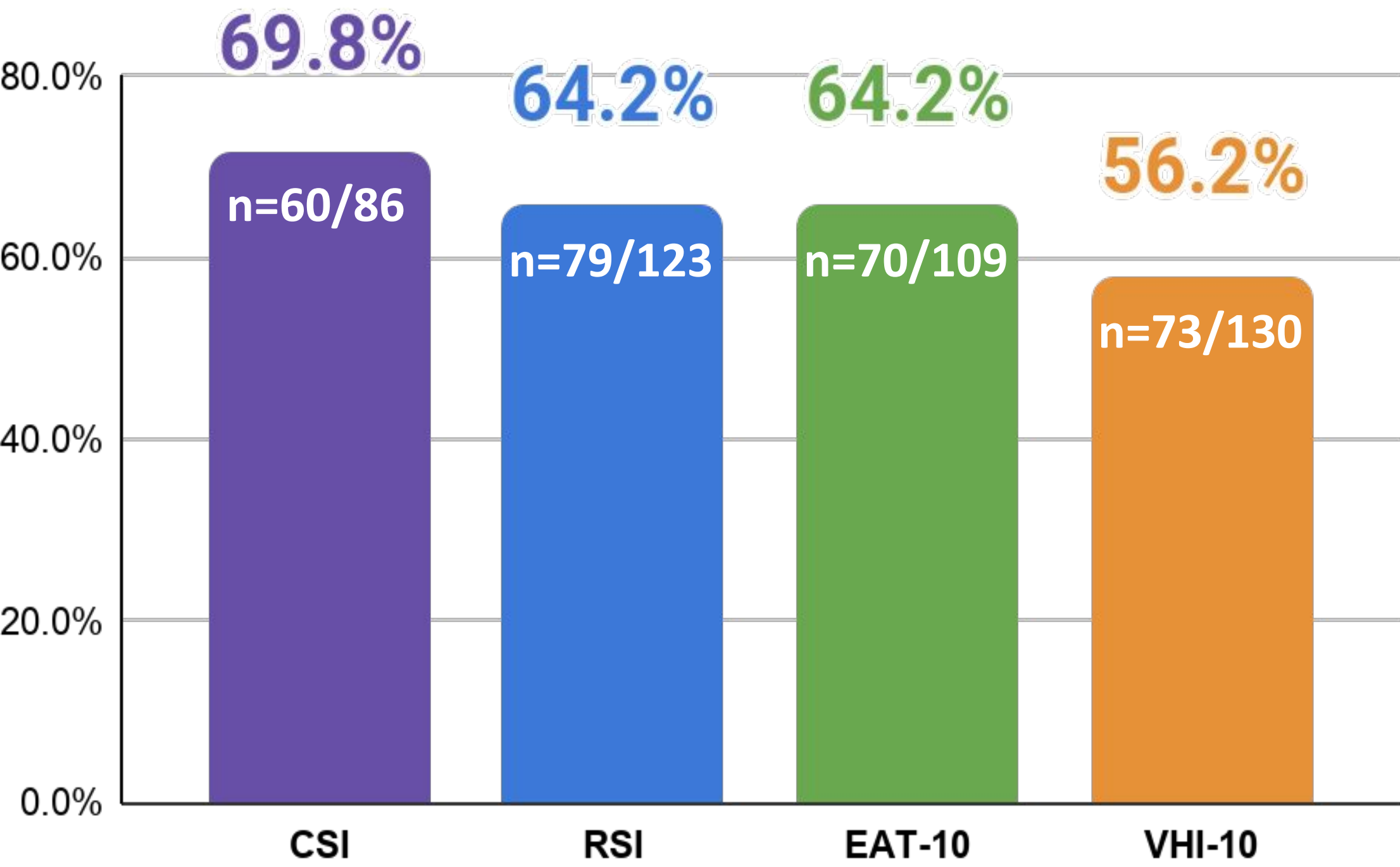


Figure 2. Mean Change in PROM Scores in Abnormal Baseline Symptoms

PROM	Abnormal Baseline N (% of cohort)	Mean Change (Δ)*	p-value**
CSI ≥ 3	86 (53.8%)	-5.01	<0.001
RSI > 13	123 (76.9%)	-4.24	<0.001
EAT-10 ≥ 3	109 (68.1%)	-3.33	<0.001
VHI-10 ≥ 11	130 (81.3%)	-3.61	<0.001

* Paired t-tests

** Statistical significance was defined as p<0.05

- **There was significant improvement in EAT-10 scores in reported dysphagia subgroup (n=87)**

Figure 3. Dysphagia Subgroup EAT-10 Scores

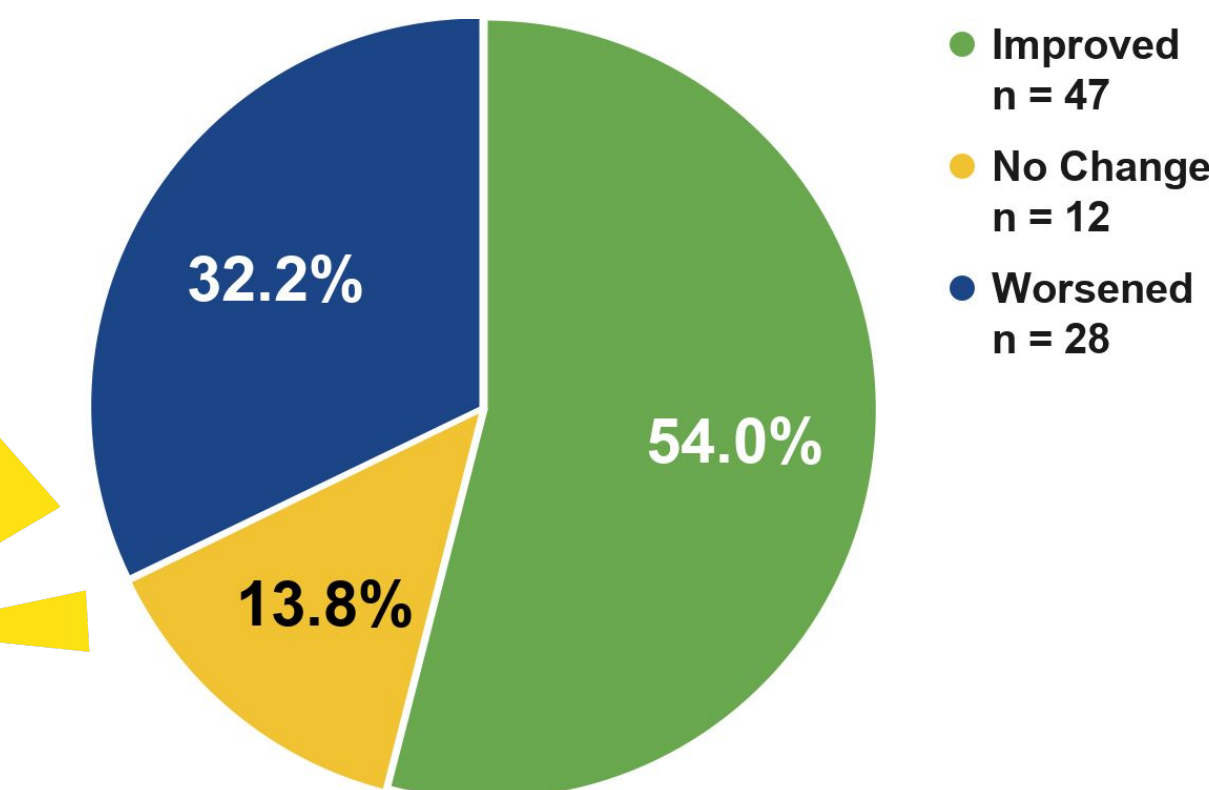
Measure	Pre (Mean ± SD)	Post (Mean ± SD)	Mean Change (Δ)*	p-value**
EAT-10	14.68 ± 10.19	12.77 ± 10.00	-1.91	0.030

* Paired t-tests

** Statistical significance was defined as p<0.05

21 (24.1%) patients achieved normalization of EAT-10 Scores (<3)

Figure 4. Dysphagia Subgroup Clinical Improvement



- **All PROMs improved significantly within the overall cohort (n=160)**

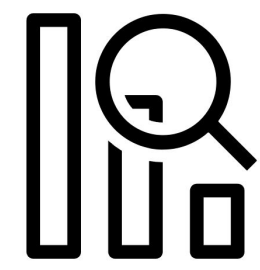
Figure 5. Pre vs Post IML PROM Scores

PROM	Pre (Mean ± SD)	Post (Mean ± SD)	Mean Change (Δ)*	p-value**
CSI	8.39 ± 9.40	6.72 ± 8.51	-1.68	0.010
RSI	19.98 ± 8.59	17.31 ± 8.74	-2.68	<0.001
EAT-10	10.78 ± 10.13	8.90 ± 9.57	-1.88	<0.001
VHI-10	18.95 ± 10.41	16.91 ± 10.74	-2.03	0.019

* Paired t-tests

** Statistical significance was defined as p<0.05

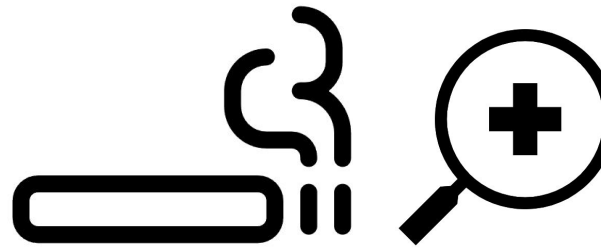
ADDITIONAL FINDINGS



Symptom improvement was not associated with:

- Injection approach
- Follow-up interval
- Gender
- Injectable material
- Injected volume
- GERD

Patients with a smoking history demonstrated greater improvement in EAT-10 scores (p=0.032).



Patients whose EAT-10 scores improved had greater CSI improvement compared to those without EAT improvement.



Mean CSI change: -3.61 vs +0.09
Mean difference: 3.69, p=0.004
(Mann-Whitney p<0.001)

CONCLUSIONS

- Injection medialization laryngoplasty was associated with significant short-term improvement in cough severity, reflux-related throat symptoms, dysphagia, and voice handicap.
- Patients with abnormal baseline symptoms demonstrated the greatest benefit.
- More than half of dysphagic patients improved, and one-quarter achieved normalization of swallowing symptoms.
- Treatment of glottic insufficiency should be considered in older patients with persistent throat-related complaints.

REFERENCES

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Abbreviations

VHI-10 = Voice Handicap Index-10
CSI = Cough Severity Index
GERD = Gastroesophageal Reflux Disease

RSI = Reflux Symptom Index
EAT-10 = Eating Assessment Tool-10
PROM = Patient-Reported Outcome Measure