



INTRODUCTION

Presbyphonia is a common age-related voice disorder characterised by structural and functional vocal fold changes ⁽¹⁾ and manifests as breathy, weak, effortful voice, reduced projection, vocal fatigue, and loss of communicative confidence ⁽²⁾. Despite these consequences, age-related voice change is often dismissed as an inevitable feature of ageing. As life expectancy increases and older adults remain socially, professionally, and vocally active, the burden of presbyphonia is expected to rise. Management may include voice therapy and/or procedural intervention, yet cohort characteristics and factors associated with improved outcomes remain poorly defined.

Aim: To examine patient-reported and objective voice outcomes following two treatment methods for presbyphonia.

METHODS

- ❖ Retrospective cohort - 244 patients (141 male, 103 female; mean age 76.19 ± 6.79 years) attending a private laryngology clinic (SVAS) and a sub cohort referred to a private voice therapy clinic (CMVS).
- ❖ Presbyphonia - defined as age ≥60 years with laryngostroboscopic evidence of vocal fold atrophy and/or glottic insufficiency ⁽³⁾.
- ❖ Assessment: Videolaryngostroboscopy, Patient reported outcome measures - Voice Handicap Index-10 (VHI-10) ⁽⁴⁾ and Glottal Function Index (GFI) ⁽⁵⁾ at initial assessment and discharge & voice recordings for acoustic analysis.
- ❖ Documented laryngostroboscopy findings were coded into four groups: movement problems, vocal fold atrophy, glottic insufficiency and hyperfunction.

RESULTS

- ❖ Baseline VHI-10 and GFI scores indicated elevated voice-related and glottic function symptoms across the cohort.
- ❖ Baseline VHI-10 scores were significantly higher in the procedural intervention group (mean = 23.83 ± 9.32, n =12) than in the voice-therapy-only group (mean = 15.59, ± 9.14, n = 148, *p* = .011).
- ❖ VHI-10 improved significantly from baseline to discharge in both the procedural intervention group (mean pre - 21.34 ± 8.69; mean post -12.45 ± 8.40); *p* ≤ 0.001) and the voice therapy group (mean pre -18.12 ± 7.83; mean post - 11.65 ± 9.10; *p* ≤ 0.001). See Figure 1.

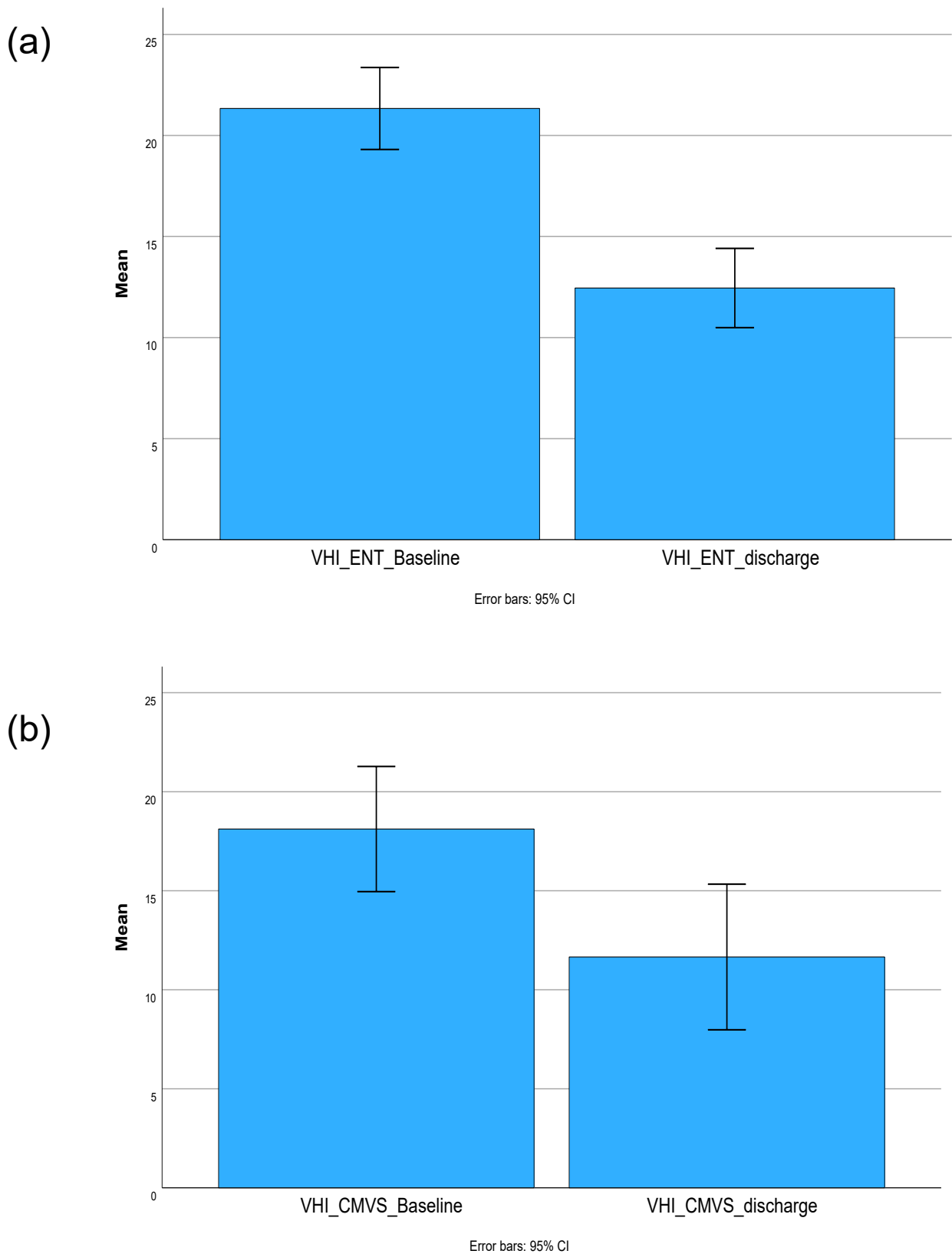


Figure 1: Improvement in baseline VHI-10 in (a) procedural intervention group and (b) voice therapy group

- ❖ GFI improved significantly only in the procedural intervention group (mean pre-10.72 ± 4.81; mean post - 6.72 ± 5.11; *p* < .001).
- ❖ Acoustic analysis (HNR Ratio and CPP) revealed no significant change from baseline to discharge in either the procedural intervention group or the voice therapy group.
- ❖ Those with vocal fold atrophy identified on videolaryngostroboscopy showed significantly increased changes in VHI-10 in the procedural intervention group.

CONCLUSIONS

- ❖ Baseline VHI-10 and GFI indicate significant symptom burden for this cohort.
- ❖ Higher baseline VHI-10 scores in the procedure-only group suggest that those with a stronger significant burden are referred directly for more invasive intervention after initial assessment by a laryngologist.
- ❖ Both treatment approaches were associated with improvements in patient-perceived voice handicap (VHI-10), while procedural intervention was additionally associated with improved functional voice impact (GFI). These findings suggest that treatment effects following procedural intervention may extend beyond patients’ perception of voice handicap.
- ❖ Although the acoustic measures did not show statistically significant changes from baseline to discharge in either treatment group, small sample sizes may have limited the ability to detect treatment-related changes..

LITERATURE CITATIONS

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