

Key for Supplemental Material S3.

Laryngeal imaging key:

Glottal margins (smoothness, straightness): smooth; right vocal fold edge is atrophic and bowed.

Supraglottal compression: was lateral-medial, left greater than right and mild anterior-posterior.

Mucosal wave: asymmetric.

Amplitude of vibration: reduced.

Adynamic segments: none.

Glottal closure pattern: incomplete and open phased dominant with compensation & effort.

Left/right phase symmetry: asymmetric & open-phase dominant.