

**Figure S3.** Estimation of the anterior, middle, and posterior lines for computing the asymmetry parameters AP and AA from high-speed videoendoscopy (HSV).



*Note.* To estimate SQw, OQw, PA, and AA from the HSV image sequence, in the first place a compensation for translational motion artifacts was performed. Then, an expert user speech-language pathologist defines the glottal midline indicating the anterior, middle, and posterior vibration portion of the glottis. The images of the video are converted to grayscale. Then, using a threshold method, create a glottal segmentation of all images and create the digital kymogram. Finally, from the edges of kymogram, the lateral displacement waveforms are obtained. For more information, see Mehta et al. (2011).