Supplementary Online Content


eTable 1. Distribution of Site Classifications of 178 participants

eTable 2. Confusion Matrix Between Site Diagnoses and External Rater Classification

eFigure 1. A flow chart to illustrate the design of the study

eMethods. The tasks included in the Speech Recording and Sentences Used in Nasolaryngoscopy Testing

This supplementary material has been provided by the authors to give readers additional information about their work.
Online Supplementary Materials included:

**eTable 1. Distribution of Site Classifications of 178 participants**

<table>
<thead>
<tr>
<th>11 Categories</th>
<th>Number</th>
<th>Percent</th>
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</thead>
<tbody>
<tr>
<td>ADSD alone*</td>
<td>35</td>
<td>19.7</td>
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<tr>
<td>ABSD alone</td>
<td>6</td>
<td>3.4</td>
</tr>
<tr>
<td>VT alone</td>
<td>6</td>
<td>3.4</td>
</tr>
<tr>
<td>ADSD with VT*</td>
<td>27</td>
<td>15.1</td>
</tr>
<tr>
<td>ABSD with VT</td>
<td>6</td>
<td>3.4</td>
</tr>
<tr>
<td>MTD alone</td>
<td>29</td>
<td>16.3</td>
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<tr>
<td>ADSD with MTD*</td>
<td>31</td>
<td>17.4</td>
</tr>
<tr>
<td>ADSD with VT and MTD*</td>
<td>9</td>
<td>5.0</td>
</tr>
<tr>
<td>VT with MTD</td>
<td>8</td>
<td>4.5</td>
</tr>
<tr>
<td>Paralysis/paresis</td>
<td>15</td>
<td>8.4</td>
</tr>
<tr>
<td>Other</td>
<td>6</td>
<td>3.4</td>
</tr>
<tr>
<td>Total</td>
<td>178</td>
<td>100</td>
</tr>
</tbody>
</table>

*Patients with some form of SD

**eTable 2. Confusion Matrix Between Site Diagnoses and External Rater Classification**

<table>
<thead>
<tr>
<th>Site Diagnosis</th>
<th>External Rater</th>
<th>External Rater</th>
<th>External Rater</th>
<th>External Rater</th>
<th>External Rater</th>
<th>Percent</th>
<th>Percent</th>
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<tbody>
<tr>
<td></td>
<td>ADSD</td>
<td>ABSD</td>
<td>MTD</td>
<td>Tremor</td>
<td>Paralysis</td>
<td>Site</td>
<td>Same Rater and Site Classification</td>
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<td>24</td>
<td>3</td>
<td>7</td>
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<tr>
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<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3.3</td>
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<tr>
<td>MTD</td>
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<td>0</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>2.5</td>
</tr>
<tr>
<td>Tremor</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>5.6</td>
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<tr>
<td>Paralysis/pare</td>
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<td>0</td>
<td>3</td>
<td>0</td>
<td>6</td>
<td>1</td>
<td>6.25</td>
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<tr>
<td>Other</td>
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<td>1</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>2.5</td>
</tr>
<tr>
<td>Total</td>
<td>80</td>
<td>2</td>
<td>28</td>
<td>29</td>
<td>10</td>
<td>11</td>
<td>160</td>
</tr>
</tbody>
</table>

Percent External Rater Classification: 46.25 1.25 12.5 15 1.89 4.38

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Figure 1. A flow diagram of the study which initially included participant recruitment and speech and nasoendoscopy videorecordings at 4 sites and site diagnosis into one of 11 categories. Second 4 external raters viewed the videorecordings and classified the participants using the same 11 categories. Third, 12 raters from the 4 sites which included speech-language pathologists (SLPs), otolaryngologists (OTL) and neurologists specializing in movement disorders classified 50 patients using the same 11 categories. Finally a 4 stage Delphi process was used to identify groups of attributes for each of 4 disorders, the Spasmodic Dysphonia Attributes Inventory.
eMethods
Speech Tasks
1. Repeating Sentences with Glottal Stops
   Tom wants to be in the army.
   We eat eels every day.
   I want to put my doll in the cart.
   I hurt my arm on the iron bar.
   Are the olives large?
   Polly wanted to loll on the hearth.
   John argued ardently about honesty.
   Jack ran to get an apple for Sally.
   We mow our lawn all year.
   He dashed to the back of the factory.
2. Sentences with voiceless consonants before a vowel
   He has gone home because he is hungry.
   The puppy bit the tape.
   Harry is happy because he has a new horse.
   During baby-hood he had only half a head of hair.
   Who says a mahogany highboy isn't heavy?
   A high, harsh voice is a handicap.
   Boys were singing songs outside of our house.
   Sally fell asleep in the soft chair.
   I saw six birds in that small nest.
   Intensity is one of several aspects of stress.
3. Repeating sentences in a whisper:
   Tom wants to be in the army.
   We eat eels every day.
   Jack ran to get an apple for Sally
   He has gone home because he is hungry.
   The puppy bit the tape.
   Boys were singing songs outside of our house.
4. Prolonging vowels for at least 10 seconds each:
   /i/ (the vowel sound in EAT)
   /a/ (the vowel sound in LAH)
5. Shouting phrases
   No! Not Now!
   Wait for me!

Nasolaryngoscopy Sentences
1. Sentences
   We eat eels every day.
   Each time it oozes blue.
   She speaks pleasingly.
   Peter needs help at the peak.
2. Shouted phrases
   "Wait for me!"
   "No! Not Now!"