Supplementary Online Content


eTable 1. Literature Searches and Keywords
eTable 2. Newcastle-Ottawa Scale Quality Assessment of Included Studies
eFigure 1. Forest Plot of Success Rate (Postoperative AHI <1) After Surgery
eFigure 2. Forest Plot of Success Rate (Postoperative AHI <5) After Surgery
eFigure 3. Funnel Plot of Standard Error by Difference in Means of the AHI

This supplementary material has been provided by the authors to give readers additional information about their work.

© 2017 American Medical Association. All rights reserved.
Table 1. Literature Searches and Keywords

- **PubMed**
  Mesh Term: "Sleep Apnea, Obstructive", “Laryngoscopy”
  Full Term: sleep apnea, obstructive sleep apnea, OSA, lingual tonsillectomy, lingual tonsil, sleep endoscopy
  \[\left(\text{"Sleep Apnea, Obstructive"[Mesh]} \text{ OR } \text{"OSA" OR } \text{"sleep apnea" OR } \text{"obstructive sleep apnea"} \right) \text{ AND } \left(\text{"Laryngoscopy"[Mesh]} \text{ OR } \text{"sleep endoscopy" OR } \text{"lingual tonsil" OR } \text{"lingual tonsillectomy"} \right)\]
  Filter by humans, child: birth-18 years, infant: birth-23 months

- **Medline**
  Mesh Term: "Sleep Apnea, Obstructive", “Laryngoscopy”
  Full Term: sleep apnea, obstructive sleep apnea, OSA, lingual tonsillectomy, lingual tonsil, sleep endoscopy
  \[\left(\text{MH "Sleep Apnea, Obstructive+"} \text{ OR } \text{"sleep apnea" OR } \text{OSA OR } \text{"obstructive sleep apnea"} \right) \text{ AND } \left(\text{MH "Laryngoscopy"} \text{ OR } \text{"sleep endoscopy" OR } \text{"lingual tonsil" OR } \text{"lingual tonsillectomy"} \right)\]
  Filter by humans, all child: 0-18 years

- **EMBASE**
  Full term: sleep apnea, OSA, obstructive sleep apnea, sleep endoscopy, lingual tonsil, lingual tonsillectomy
  \[\left(\text{‘sleep apnea’ OR ‘obstructive sleep apnea’ OR osa} \right) \text{ AND } \left(\text{‘sleep endoscopy’ OR ‘lingual tonsil’ OR ‘lingual tonsillectomy’} \right)\]
  Filter by humans, newborn: up to 1 month, infant: 1 to 12 months, child: 1 to 12 years or unspecified, preschool child: 1 to 6 years, school child: 7-12 years, adolescent: 13 to 17 years

- **Cochrane library**
  Mesh Term: "Sleep Apnea, Obstructive"
  Full term: "Sleep Apnea", "lingual tonsil", "lingual tonsillectomy"
(“Sleep apnea” OR (“Sleep apnea syndromes”[Mesh])) AND (“lingual tonsil” OR “lingual tonsillectomy”)

**Data Source:** PubMed, MEDLINE, EMBASE, and Cochran; **Search date:** 2016.09.29
**eTable 2. Newcastle-Ottawa Scale Quality Assessment of Included Studies**

<table>
<thead>
<tr>
<th>First author / Year</th>
<th>Selection</th>
<th>Comparability</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Representativeness of Selection</td>
<td>Ascertainment of Outcome Was Not</td>
<td>Comparability: Age</td>
</tr>
<tr>
<td>20(^{20}) Abdel-Aziz /2011</td>
<td>★</td>
<td>★</td>
<td>★</td>
</tr>
<tr>
<td>22(^{22}) Truong/2012</td>
<td>★</td>
<td>★</td>
<td>★</td>
</tr>
<tr>
<td>24(^{24}) Thottam /2015</td>
<td>★</td>
<td>★</td>
<td>★</td>
</tr>
<tr>
<td>26(^{26}) Prosser/2017</td>
<td>★</td>
<td>★</td>
<td>★</td>
</tr>
</tbody>
</table>
The success rate was 17% (95% CI, 7% to 35%) when success defined as AHI < 1 after surgery.
The success rate was 51% (95% CI, 25% to 76%) when success defined as AHI < 5 after surgery.
**Figure 3.** Funnel Plot of Standard Error by Difference in Means of the AHI

The symmetry of this plot indicates there was no apparent problem of publication bias (P = 0.066).