

Epiglottis collapse in adult obstructive sleep apnea: A systematic review.

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Abstract

OBJECTIVES/HYPOTHESIS:

To systematically review the international literature evaluating the role of the epiglottis in snoring and obstructive sleep apnea and to explore possible treatment options available.

DATA SOURCES:

PubMed, Scopus, Embase, Google Scholar, Book Citation Index-Science, CINAHL, Conference Proceedings Citation Index-Science, The Cochrane Collaboration Databases, and Web of Science.

REVIEW METHOD:

The searches were performed from the first year of each database through March 5, 2015.

RESULTS:

Fourteen studies about the prevalence of epiglottis collapse in obstructive sleep apnea (OSA) were found. Most involved drug-induced sleep endoscopy studies that indirectly reported their findings about epiglottis collapse. The data suggests that the prevalence of epiglottis collapse in OSA is higher than previously described. The epiglottis has been implicated in 12% of cases of snoring, and sound originating from it has a higher pitch than palatal snoring. Continuous positive pressure (CPAP) surgery and positional therapy in the treatment of epiglottis collapse were also considered. Lateral position of the head may reduce the frequency of epiglottis collapse. With regard to CPAP, available reports suggest that it may accentuate collapse of the epiglottis. Surgery may help reduce snoring in some patients with a lax epiglottis and improve OSA in patients undergoing multilevel surgery.

CONCLUSION:

Knowledge regarding the role of the epiglottis in adult OSA and snoring patients is limited. The prevalence of this phenomenon in OSA seems to be greater than previously reported, and more research is needed to understand its role in OSA and the best way to treat it.

LEVEL OF EVIDENCE:

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KEYWORDS:

Obstructive Sleep Apnea; continuous positive airway pressure; epiglottis; hypopharynx; positional therapy; snoring; surgery; systematic review

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Awake examination versus DISE for surgical decision making in patients with OSA: A systematic review.

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Abstract

OBJECTIVE:

Traditionally, upper airway examination is performed while the patient is awake. However, in the past two decades, drug-induced sleep endoscopy (DISE) has been used as a method of tridimensional evaluation of the upper airway during pharmacologically induced sleep. This study aimed to systematically review the evidence regarding the usefulness of DISE compared with that of traditional awake examination for surgical decision making in patients with obstructive sleep apnea (OSA).

DATA SOURCES:

Scopus, PubMed, and Cochrane Library databases were searched.

REVIEW METHODS:

Only studies with a primary objective of evaluating the usefulness of DISE for surgical decision making in patients with OSA were selected. The included studies directly compared awake examination data with DISE outcome data in terms of possible influences on surgical decision making and operation success.

RESULTS:

A total of eight studies with 535 patients were included in this review. Overall, the surgical treatment changed after DISE in 50.24% (standard deviation 8.4) cases. These changes were more frequently associated with structures contributing to hypopharyngeal or laryngeal obstruction. However, these differences do not automatically indicate a higher success rate.

CONCLUSION:

This review emphasized the direct impact of DISE compared with that of awake examination on surgical decision making in OSA patients. However, it is also clear that the available published studies lack evidence on the association between this impact and surgical outcomes. *Laryngoscope*, 126:768-774, 2016.

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