Removal of small tonsils helps children with obstructive sleep apnea

Approximately 2% to 4% of children are affected by obstructive sleep apnea (OSA), a condition that can result in decreased memory, bad grades and behavioral problems in school when it is not treated. Large tonsils and adenoids can reduce the size of a child's airway and make it difficult to breathe during sleep. Surgery to remove enlarged tonsils and adenoids is the standard treatment for children who are diagnosed with OSA. However, little is known about the benefit of removing small tonsils and adenoids. Our study looked at the benefit of removing tonsils of varying sizes in children with OSA.

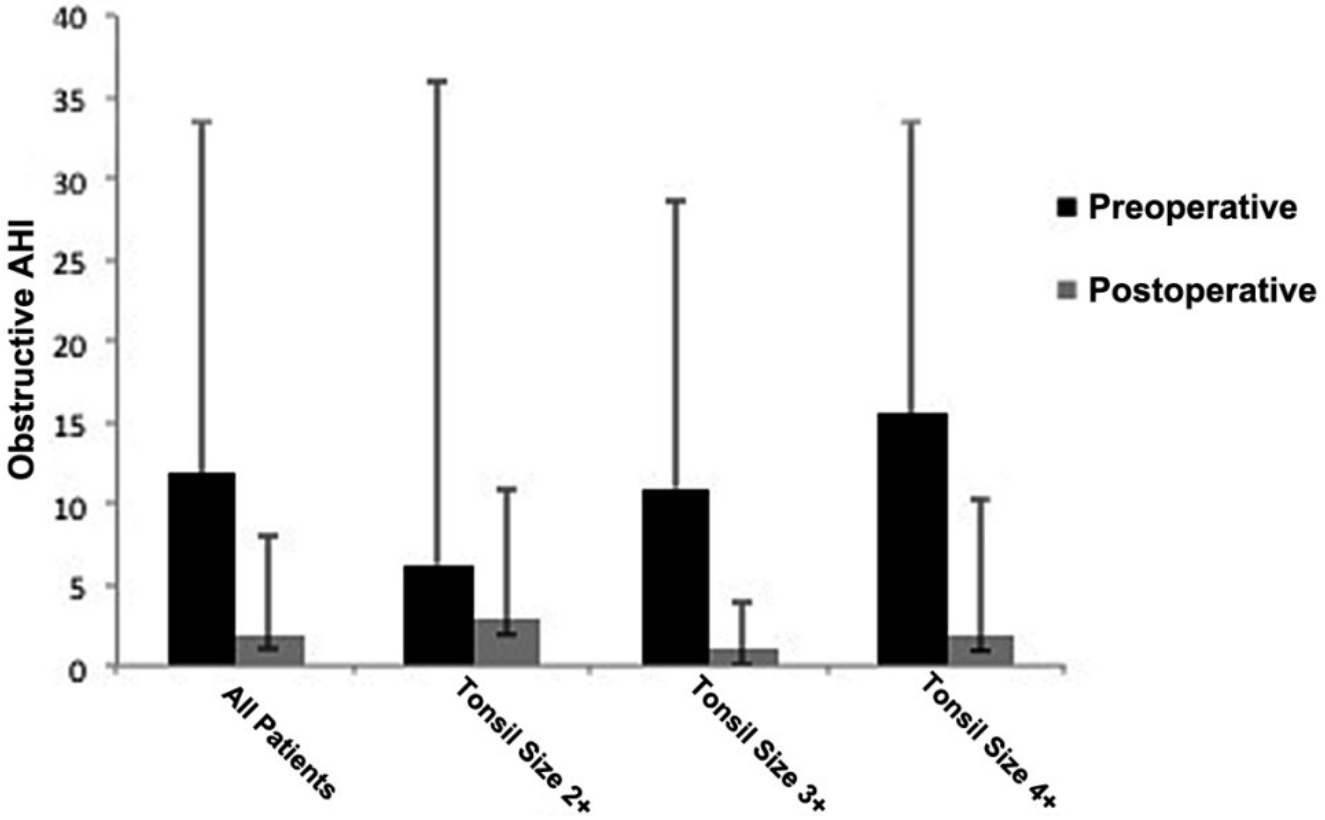

Fig. 1. Median obstructive apnea-hypopnea index (oAHI) before and after adenotonsillectomy by tonsil size. All groups had a significant improvement in median oAHI.

In our study, children were diagnosed with OSA after undergoing a sleep study. Otolaryngology (ear, nose and throat) doctors determined each child's tonsil size before performing surgery to remove the tonsil and adenoids. After surgery, these children had a second sleep study. We found that after surgery, there was significant improvement in the severity of OSA for all children, even

those with small tonsils and that the likelihood that a child would continue to have OSA after surgery was not related to the tonsil size. This suggests that even small tonsils can contribute significantly to the narrowing of a child's airway.

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Publication

Influence of Tonsillar Size on OSA Improvement in Children Undergoing Adenotonsillectomy.
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