Adenoidectomy for the Treatment of Pediatric Sleep Disordered Breathing

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Background

- Pediatric obstructive sleep-disordered breathing (SDB) can be due to adenoid and/or palatine tonsil hypertrophy
- Poses quality of life (QoL) detriments to patients and caregivers
- Past SDB QoL studies focus on adenotonsillectomy
- Lack of QoL data on adenoidectomy alone

Goal

Determine if adenoidectomy alone improves QoL for SDB, and measure the magnitude of that improvement using validated instruments

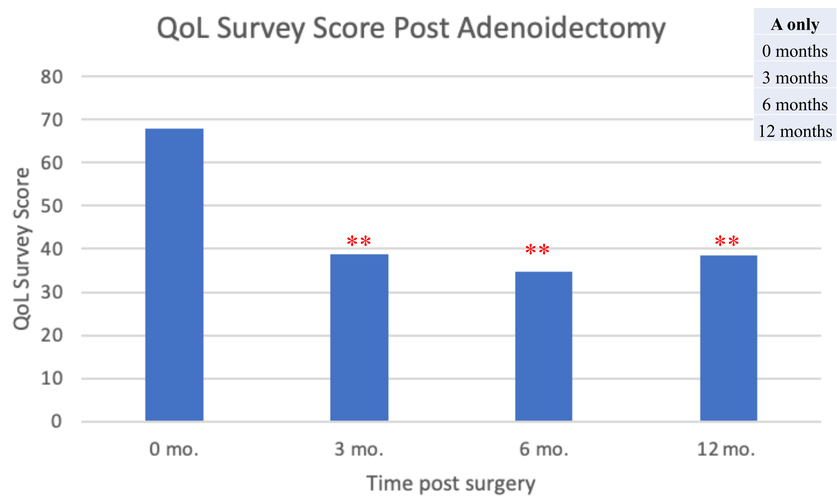
Methods

- Observational, prospective cohort study
  - Group 1: Adenoidectomy (alone) (A)
  - Group 2: Adenotonsillectomy (T&A)
- Surgery type based on clinical assessment by a board-certified pediatric otolaryngologist
  - Tonsils removed if ≥ 3+
  - Preserved if ≤ 2+
- Timeline: 2/2021 – 2/2023
- OSA-18 QoL Survey
  - Preop
  - Postop: 3, 6, 12 months

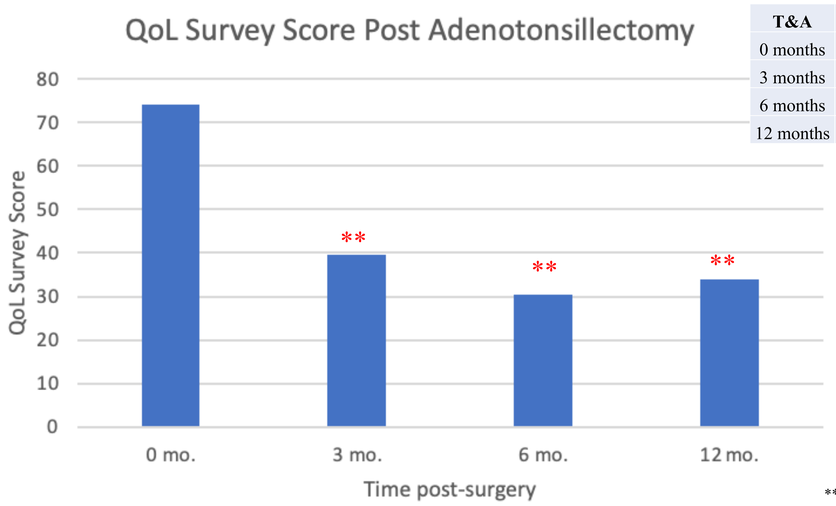
QoL Survey Score:

- <60: Minor
- 60-80: Moderate
- >80: Major

Results



A only	N	Average
0 months	47	67.1
3 months	10	37
6 months	20	36.1
12 months	14	39



T&A	N	Average
0 months	54	74.9
3 months	13	36.3
6 months	20	31.6
12 months	18	33

** statistical significance

Total patients n=101

- A n=47 / T&A n=54

- Average Pre-Op: **Moderate Effect** on QoL
- Average Post-Op: **Minor Effect** on QoL
  - At 3 months, 6 months, 12 months

- Significant improvement in post-op QoL ($p<0.001$)
- No statistical difference in post-op QoL between groups ($p>0.05$)

Conclusion

- Adenoidectomy alone provides improvement in QoL for pediatric patients with SDB
- Our results show relative equivalence in QoL survey results between adenotonsillectomy and adenoidectomy alone
- Adenoidectomy alone is a reasonable surgical option for children with SDB for whom palatine tonsils are not enlarged
- Study ongoing

Limitations

- Respondent selection
- Response accuracy
- Lack of patient continuity
  - Unable to evaluate QoL changes over time postoperatively

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