



Title North of England and Scotland Study of Tonsillectomy and Adeno-

Tonsillectomy in Children (NESSTAC): A Pragmatic Randomized Controlled Trial with a Parallel Non-Randomized Preference Study

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Aim

To examine the clinical and cost effectiveness of tonsillectomy/adenotonsillectomy in children aged 4 to 15 years with recurring sore throat in comparison to standard nonsurgical management.

Conclusions and results

Children and parents exhibited strong preferences for surgical management of recurring sore throat. Recurring sore throat in all children improved over time, but trial participants randomized to surgical management tended to experience better outcomes than those randomized to medical management.

Of the 1546 children assessed for eligibility, 817 were excluded (531 not meeting inclusion criteria, 286 refused) and 729 enrolled to the trial (268) or cohort study (461). The mean (standard deviation) episode of sore throats per month was: Year 1 – cohort medical 0.59 (0.44), cohort surgical 0.71 (0.50), trial medical 0.64 (0.49), trial surgical 0.50 (0.43); Year 2 – cohort medical 0.38 (0.34), cohort surgical 0.19 (0.36), trial medical 0.33 (0.43), trial surgical 0.13 (0.21). During both years of follow-up, children randomized to surgical management were less likely to record episodes of sore throat than those randomized to medical management; the incidence rate ratios in years 1 and 2 were 0.70 (95% confidence interval [CI] 0.61 to 0.80) and 0.54 (95% CI 0.42 to 0.70) respectively. The incremental cost-effectiveness ratio was estimated at 261 pounds sterling (GBP) per sore throat avoided (95% CI GBP 161 to GBP 586). Parents' mean willingness to pay for the successful treatment of their child's recurring sore throat was GBP 8059 (median GBP 5000). The estimated incremental cost per quality-adjusted life year (QALY) ranged from GBP 3129 to GBP 6904 per QALY gained.

Recommendations

The limitations of the study, due to poor response at follow-up, support the continuing careful use of "watchful waiting" and medical management in primary and secondary care (in line with current clinical guidelines) until clear-cut evidence of clinical and cost effectiveness is available.

Methods

See Executive Summary link at www.hta.ac.uk/project/1212.asp.

Further research/reviews required

- 1) As treated analysis
- Methodological research of alternative methods of data collection
- 3) Larger sample completing utility/willingness-to-pay studies.