


34 A bite-sized summary of a piece of research supported by NIHR CLAHRC West Midlands.

May 2019

3  Prevention and detection  
of diseases



**Incidence of indications for tonsillectomy and  
frequency of evidence-based surgery**

### Background:

- Tonsillectomy (removal of the tonsils) is the most common surgical operation in children, with around 37,000 carried out each year, costing the NHS £42 million.
- Recurrent or chronic sore throat (defined by guidelines as 7 or more sore throats per year) is the most common reason for tonsillectomy in the UK.
- Current evidence suggests it results in a slight reduction in symptoms in children (3-15 years) who are severely-affected, but it is not worthwhile in other cases.
- There has been no population-wide study looking at how many children undergo tonsillectomy.
- We reviewed primary care data from The Health Improvement Network (THIN), containing anonymised information from over 700 UK general practices, to chart tonsillectomies over a 12-year period.

## Findings:

- We looked at 1,630,807 children who were followed up between 2005 and 2015.
- Around 4 in 1,000 children met evidence-based criteria for surgery, most of whom had a high number of recurrent sore throats.
- Fewer than 1 in 7 of these children were given the surgery.
- Most tonsillectomies were given for non-evidence-based reasons. In particular, the guidelines for the minimum number of sore throats per year was not followed – most tonsillectomies (54.5%) were carried out on children reporting only 1-4 sore throats per year.
- Overall, 7 in 8 (32,500 out of 37,000 annually) of those who undergo tonsillectomy are unlikely to benefit.
- The broad definition of a sore throat may slightly overestimate the number of evidence-based indications.
- The findings are drawn from a very large dataset over a long period of time.

## Reference:

Šumilo D, Nichols L, **Ryan R, Marshall T**. Incidence of indications for tonsillectomy and frequency of evidence-based surgery: a 12-year retrospective cohort study of primary care electronic records. *Br J Gen Pract* 2018; 69: e33-41. doi: <https://doi.org/10.3399/bjgp18X699833>.



## Recommendations for Practice

Most children meeting the evidence-based criteria for a tonsillectomy do not undergo the surgery, so it cannot be considered a necessity.

Doctors should inform parents that most children with either recurrent sore throats or sleep apnoea do not undergo tonsillectomy and have no need to.

## What is NIHR CLAHRC West Midlands?

The Collaboration for Leadership in Applied Health Research and Care (CLAHRC) is a partnership between three universities (Birmingham, Warwick, and Keele) and a number of health and social care organisations in the West Midlands. We are funded by the National Institute for Health Research with a mission to undertake high-quality applied health research focused on the needs of patients to improve health services locally and beyond. For further information, visit:

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