

COBLATION[®] Intracapsular Tonsillectomy (CIT) delivers low morbidity and return to theatre rates within 28 days, and low rates of re-operation after 5 years, in a paediatric population

Powell S, Tweedie DJ, Jones NE, Bateman ND, Keltie K, Sims AJ. Coblation intracapsular tonsillectomy: A cohort study of NHS practice in England using Hospital Episode Statistics. *Clin Otolaryngol.* 2022;47:471–477.

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Key points

After CIT in children aged ≤16 years:



1.2% of patients experienced bleeding within 28 days post-operatively



2.2% of patients required further tonsil surgery



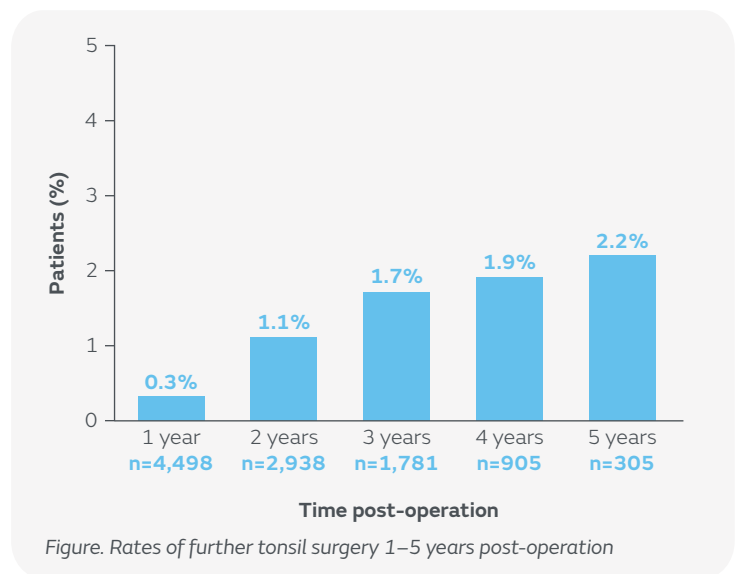
Post-operative bleeding rates were lower than studies reporting on extracapsular tonsillectomy techniques, as discussed by the authors

Overview

- Retrospective, observational, cohort study to determine the safety of CIT
- Inclusion criteria: children (aged ≤16 years) undergoing bilateral CIT; exclusion criteria: prior tonsillectomy procedures in the previous 5 years
- The study utilised routine administrative data from Hospital Episode Statistics
- A total of 5,815 admissions from four Ear, Nose and Throat centres were identified; 5,525 patients were included in the analysis:
 - Median age: 4 years (interquartile range: 2–5 years)
 - 83% of patients were admitted due to obstructive, rather than infective, causes
 - 91% of patients had concomitant adenoidectomy
- Maximum longitudinal follow up: 7 years and 3 months

Results

- 1% (57/5,525) of patients had an in-hospital complication
- Within 28 days post-operatively, 6.0% (329/5,525) of patients were readmitted to hospital, 1.2% (66/5,525) experienced bleeding, 0.7% (39/5,525) had an infection, 0.3% (18/5,525) experienced pain and 0.2% (9/5,525) had a secondary haemorrhage requiring surgical management
- At five years post-operation, 2.2% (305/5,525) of patients had further tonsil surgery (Figure)
- Lower morbidity was shown with CIT in comparison to results from other studies, which are thought to mainly report on extracapsular techniques:
 - The National Prospective Tonsillectomy audit (n=33,921) showed return to theatre rates of 0.8–1.8% and bleeding rates of 1.1–4.9%
 - In a paediatric tonsillectomy cohort study (n=317,924), return to theatre rates were 1.2%, and dissection bleeding rates were 5.0%, across all dissection techniques studied



Conclusions

CIT results in low bleeding and return to theatre rates within 28 days post-operatively, and low re-operation rates after 5 years, in a paediatric population undergoing tonsillectomy. These rates were discussed by the authors as being favourable in comparison to extracapsular techniques.