Changing trends in pediatric tonsil surgery

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Conclusion
Tonsillotomy (TT) is nowadays more common than tonslectomy (TE) in treatment of airway obstruction in children <16 years of age.

The change of surgical method from TE to TT
- has decreased the complications of tonsil surgery and visits to the emergency department
- has diminished the costly inpatient days because of complications and number of postoperative hemorrhages with return-to-theatre

Introduction

- Many studies have shown the advantages of TT compared to TE; TT is associated with less morbidity such as postoperative hemorrhage and pain.
- There are still few concerns related to this new technic, e.g. the potential tissue regrowth and re-surgery.
- The aim of this study was to analyze the changes in tonsil surgery during a ten-year-period and the effects of these changes to the number of complications, emergency department visits, and readmissions to hospital after tonsil surgery.

Materials and methods

- Retrospective cohort study based on collected data from the patient databases in the Department of Otorhinolaryngology, Helsinki University Hospital.
- All children <16 years of age with tonsil surgery during years 2007-2016.
- The data collected included:
  - the number of tonsil surgeries and re-surgeries
  - indications of primary and re-surgeries
  - complications, inpatient days and postoperative hemorrhages after tonsil surgeries

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Figure 1. The number of tonsil surgeries performed in children less than 16 years of age at the Department of ORL, Helsinki University Hospital in 2007-2016.

Figure 2. Emergency department visits/100 tonsil surgeries of children less than 16 years of age at the Department of ORL, Helsinki University Hospital in 2007-2016.

Figure 3. Visits at the emergency department because of complication of tonsil surgery. Distribution of indications per all TEs and TTs.

Figure 4. The changes in number of visits at the emergency department, days in hospital because of major complication and postoperative hemorrhages with return-to-theatre (RTT) in 2007-2016 at the Department of ORL, Helsinki University Hospital