## **ABSTRACT**

**Title of the abstract:** "Reliability of endoscopic A.C.E. grading system of

adenoids"

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## **OBJECTIVE:**

To assess the reliability of endoscopic ACE grading system of adenoids.

## **METHODS:**

This observational prospective study was conducted over 1 year. Patients between 3 and 16 years for adenoidectomy underwent rigid nasal endoscopy and grading was done at OPD. Intra-operative endoscopic grading of adenoids was repeated (theatre or standard grade) and still images were captured. These images were graded by three independent raters at baseline and after 3 weeks. The data was analysed by: 1) comparing first and second grading by each rater for each component of ACE grading, 2) comparing standard grade and baseline grading by each rater, 3) comparing baseline gradings of the raters with each other, 4) comparing OPD grade and the standard grade.

#### **RESULTS:**

124 patients were recruited. Good intra-rater reliability was noted for A and C components, but was less for E component. Similar results were noted on comparing the

first grading of each rater with the standard grade. Inter-rater agreement was moderate for all components, with an improvement in reliability with higher rater expertise. There was good correlation between the OPD grade and the standard grade for all components.

## **CONCLUSION:**

The ACE grading system is a reliable tool for the assessment of adenoids by raters with different levels of expertise with sufficient training, and useful in the OPD setting.

However, the study needs to be continued to accrue more patients and reassess the reliability with a larger number of patients.

# **Keywords:**

Adenoids

ACE grading

Endoscopic adenoid grading

Adenoid hypertrophy

Nasopharyngeal airway

Choana

Eustachian tube

Reliability