ABSTRACT

Objectives: To identify practice variation in the admission of post-adenotonsillectomy (T&A) patients using a national sample from 24 pediatric hospitals

Study Design: Retrospective analysis from national database

Methods: Analysis of 29,920 children undergoing T&A in 24 children’s hospitals from July 2009 to June 2010

Results: Significant practice variation in the admission of post-adenotonsillectomy patients was noted across all ages and all modifying factors. Younger patients (0-3 years), patients with obstructive sleep apnea (OSA), and patients with medical co-morbidities were more frequently admitted after T&A.

BACKGROUND

- Most T&As are performed as day cases
- Children with OSA have increased peri- and postoperative risk
- Children with comorbidities may have increased risk
- Major postoperative complications: Hemorrhage, Apneic death
- No current guidelines in effect that determine whether a patient should be admitted for T&A

OBJECTIVES

1. To determine whether admission practices after T&A are similar in a cross section of 24 pediatric hospitals in the US
2. To determine factors that influence admission practices after T&A

MATERIALS AND METHODS

Study Design and Setting: Retrospective analysis of pediatric patients undergoing T&A from sample of 24 hospitals identified using a national database of pediatric hospitals, the Pediatric Health Information System (PHIS)

Study Participants: 29,920 children aged 0 to 18 years old who underwent T&A (ICD-9-CM procedural code 28.3- tonsillectomy with adenoidectomy operation) between July 1, 2009 to June 30, 2010

Identification of comorbidities: Children with OSA were identified by the presence of ICD-9-CM diagnosis code 327.23- OSA. Children with medical co-morbidities were identified by PHIS if they carried specific diagnosis codes representing complex chronic conditions.

Inpatient vs. outpatient: Outpatient hospitalizations were identified by same day admission and discharge. If the date of discharge was not identical to the date of admission, then the patient presumably stayed overnight at the hospital and thus was classified as an inpatient.

RESULTS

- Admission Rates by Age (All hospitals)
- With OSA
- With Comorbidities
- With OSA and Comorbidities

CONCLUSIONS

- There is tremendous practice variation in admission of pediatric post-adenotonsillectomy patients nationwide that is not explained by age, obstructive sleep apnea, or co-morbidities.
- Further understanding of the optimal rate of pediatric post-adenotonsillectomy inpatient admission for patients across age groups, OSA diagnosis, and co-morbidities, would provide the opportunity to improve care and resource allocation.

REFERENCES


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