OBJECTIVE

To study uvulopalatopharyngoplasty (UPPP) from a national perspective, focusing on epidemiology of admission and patient outcomes.

STUDY DESIGN

- Descriptive study of data from a publicly available national database.

METHODS

- The Nationwide Inpatient Sample (NIS) is a publicly available database developed as part of the Healthcare Cost and Utilization Project, a Federal-State-Industry partnership sponsored by the Agency for Healthcare Research and Quality. The NIS is the largest all-payer inpatient care database in the United States.
- The NIS 2006 was searched using the International Classification of Disease, Ninth Revision (ICD-9) procedure code 27.69 (uvulopalatopharyngoplasty).
- No exclusion criteria were applied.
- Information regarding various hospital specific variables, including hospital location, teaching/academic status, source of admission (emergency, outside hospital, routine), and disposition, were obtained from the NIS.
- Univariate analyses were performed comparing pertinent variables to total charges (Table 1).
- Weighted data were reported.

RESULTS

- There were 6857 admissions after UPPP in 2006 (mean age 42.1 years, SE 0.3; average stay 2.0 days, SE 0.1). Males represent 3/4 of admissions.
- Mean total charges were $19,664 (SE $1,017).
- Caucasians constitute 68.2% of these patients, followed by 11.9% Hispanic and 11.8% African-American (there was no significant difference in total charges based on race).
- 97% of admissions resulted in routine discharge, 2.7% in discharge with services or to another facility, and 0.15% in post-operative mortality.
- The primary payer was private in 74.8% of admissions, and Medicare/Medicaid in 20.3% (there was no significant difference in charges based on payer). There was no significant difference in charges based on hospital region or hospital bed size.
- Most common concomitant procedures were palatoplasty (20.7%), pharyngoplasty (18.3%), tonsillectomy without adenoidectomy (12.2%), septoplasty, turbinectomy, and glossopexy.
- Most common diagnosis codes were obstructive sleep apnea, nasal septal deviation, sleep apnea NOS, tonsillitis, and nasal turbinoplasty.

DISCUSSION

- UPPP is most frequently performed in middle-aged patients, who also incur the lowest total charges.
- Caucasians are the predominant group that underwent surgery.
- Race was not a predictor of increased total charges.

RESOURCE UTILIZATION

- Reimbursement practices should consider the following:
  - The average admission was 2 days.
  - Elective admissions had significantly lower total charges than non-elective admissions.
  - Only 12% of admissions coded for tonsillectomy with UPPP.
- Hospitals in micropolitan and rural settings might use less resource-intensive techniques than those in large metropolitan and urban settings.

COMPLICATIONS

- There were fewer than 10 deaths out of 6857 admissions.
- This is reassuring in terms of patient counseling and risk assessment.
- This is a very low mortality rate, considering that many patients have medical co-morbidities and severe sleep apnea.

LIMITATIONS

- The use of a national database precludes in depth study of each patient encounter.
- The validity and authenticity of the data presented relies on accurate reporting from numerous and varied institutions, which cannot be verified.

CONCLUSIONS

- This study is the first to present a national perspective on patients undergoing uvulopalatopharyngoplasty.
- The typical patient is:
  - A middle-aged, Caucasian male
  - Has private insurance
  - Is undergoing surgery in a major metropolitan area
- Average total charges are $19,664.
- Average length of stay is 2 days.
- The vast majority of admissions end in routine discharge home; a small minority requires further hospital level care.
- The mortality from this procedure is 0.15%.