Obstructive Sleep Apnea And Post Operative Hemostasis Rate Following Tonsillectomy at a Singapore Pediatric Tertiary Hospital.

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ABSTRACT

Adenotonsillectomy is one of the commonest procedures to be done in children. With any surgical procedure, complications may occur.

A relatively common complication following tonsillectomy or adenotonsillectomy is bleeding and this usually occurs in the first 24 hours or up to 10 days following surgery.

Obstructive sleep apnea (OSA) has been hypothesized to be protective against post operative tonsillectomy hemorrhage, presumably due to the upregulation of prothrombotic factors. This study investigates this possible correlation in patients at our institution.

INTRODUCTION

Tonsillectomies and adenotonsillectomies are among the commonest procedures to be carried out in children throughout the world. Obstructive sleep apnea (OSA) has been hypothesized to be protective against post operative tonsillectomy hemorrhage, presumably due to the upregulation of prothrombotic factors. This study investigates this possible correlation in patients at the KK Women’s and Children’s Hospital.

The tonsillectomy post operative hemorrhage rate at the KK Women’s and Children’s Hospital is 1.39% for OSA patients, and 1.78% for recurrent tonsillitis.

METHODS AND MATERIALS

Design: Retrospective study

Period: End January 2007- end January 2013

Location: tertiary pediatric hospital

Patients: Children up to 16 years of age

Outcome measure: Post operative bleeds requiring return to the operating room for hemostasis in OSA and non-OSA patients.

RESULTS

No of cases: 2320

Adenotonsillectomies: 1581 cases

Bilateral tonsillectomies only : 730 cases

(without adenoidectomy)

Recurrent tonsillitis: 450 cases

OSA (confirmed on PSG): 383 cases

Adenotonsillar hypertrophy (no PSG, presumed OSA): 1487

Cases requiring return to OR for haemostasis: 34

Overall Post operative haemostasis rate: 1.47%

Post operative haemostasis rate in OSA patients: 1.39%

Post operative haemostasis rate in non-OSA patients: 1.78%

There were no cases of bleeding from adenoidectomy. All 2320 cases were done with monopolar diathermy. The operators range in training from first year residents to senior consultants.

CONCLUSIONS

Despite the possible upregulation of prothrombotic factors in OSA, we found no real difference in post operative tonsillectomy hemorrhage rate in our patients, contrary to findings in other studies.

REFERENCES