Adenotonsillectomy bleeding: microdebrider vs electrocautery

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ABSTRACT

To describe and compare the intraoperative blood loss between partial intracapsular tonsillectomy and adenectomy with a novel instrument sharing the same name and methodology as the previous 1.6 vs 2.2 ml/kg. Adenoid curette and adenoid microdebrider yielded similar BL but were associated with more bleeding than suction. Adenoidectomy bleeding (Table 2): Microdebrider tonsillectomy was associated with 1.2 ml/kg more BL than electrocautery tonsillectomy.

RESULTS

• Confirm or refute our suspicion that microdebrider tonsillectomy is associated with more BL than electrocautery tonsillectomy.
• Quantitate BL as a function of patient circulating blood volume
• Objectives:

METHODS

• Retrospective review
• Patients who underwent T and/or A by F.J.B.
• September 2007 – August 2008
• Patients aged 2 to 20 years who had tonsillectomy, adenoidectomy, or adenotonsillectomy over a 12 month period. Tonsillectomy was performed by microdebrider or electrocautery and adenoidectomy was performed by microdebrider, curette or suction electrocautery.

METHODS CONT'D

• Tonoflasky
1. Microdebrider – 12° PTIA™ Blade on a Straightshot® MH (Medtronic, Minneapolis, MN, USA) at 1500 rpm oscillating
2. Electrocautery – Bovie S.D. Intelect, Intellistitch
3. Adenoid Curette - followed by St. Clair Thompson forceps

RESULTS CONT'D

• Tonsillectomy BL
• Measured Hematocrit-Blood Loss (BL)
• Total time volume subtracted from microdebrider BL
• Adenoidectomy BL

CONCLUSION

Microdebrider tonsillectomy is associated with more intraoperative bleeding than electrocautery tonsillectomy (approximately twice as much blood was lost with the microdebrider but the absolute increase was insignificant from a hemodynamic perspective)

REFERENCES