

INTRA-OPERATIVE USE OF QUIKCLOT DURING ADENOTONSILLECTOMY: PROSPECTIVE PEDIATRIC TRIAL

C. S. Derkay¹, H. BAYDOUN¹, C. S. Derkay¹ ; ¹Eastern Virginia Medical School,
OTOLARYNGOLOGY, Norfolk, VA, USA

Background: Achieving hemostatic control after intra-capsular adenotonsillectomy with minimal cauterization may potentially lead to improved outcomes with respect to return to normal diet, normal activity and less use of narcotic pain medications.

Methods: Prospective, IRB-approved, non-randomized, consecutive series of children with obstructive adenotonsillar hypertrophy at a tertiary Children's hospital.

Results: One hundred consecutive children, (52 boys/48 girls), ages 3-16 (mean 4.6, std 2.2), were recruited with complete data available on all 100. Total procedure time was 19.8 +/- 4.3 minutes including total cauterization time of 155.3 +/- 59.7 seconds (60.9 +/- 31.5 for adenoids and 94.5 +/- 41.9 for tonsils) and average blood loss of 22ml (10-65). There were no major complications (0/100 episodes of post-operative bleeding or dehydration). Return to normal diet was 3.4 +/- 2.2 days. Return to normal activity was 2.8 +/- 2.1 days. Days until no further narcotics was 3.0 +/- 2.3 days. When analyzed together, the median days to complete recovery (normal diet, normal activity, no narcotics, FACES pain score <2) was 4 days. Total cautery time was positively correlated with time to return to normal activity ($p < .05$). Linear regression models show best predictor of return to normal diet to be age, BMI, tonsil size and adenoid size. Best predictor of days to no narcotics was age. Best predictors of days to return to normal activity was age and tonsil cautery time.

Conclusions: Intra-capsular microdebrider adenotonsillectomy utilizing QuikClot to enhance the hemostasis results in recovery times significantly better than previously reported for this procedure.