Blood Loss and Visibility with Esmolol vs. Labetalol in Endoscopic Sinus Surgery:

A Randomized Trial

Date: 09/04/2018
Anesthesia Protocol – Labetolol vs Esmolol Study

**Induction Protocol** – ALL Patients Receive This
- 1-2mg Midazolam prn Anxiety
- 1-3 mcg/kg Fentanyl
- 20-40mg Lidocaine
- 1-2 mg/kg Propofol
- 0.05-0.1 mg/kg Vecuronium
- Bispectral Index Monitoring (BIS) Taped to Forehead

**Maintenance of Anesthesia** – ALL Patients Initially Follow this Algorithm
- 1-2% Sevoflurane (End Expired); do **NOT** use Desflurane/Isoflurane
- Fentanyl prn – dosage max, 5mcg/kg
- MAP Goals
  - Patient w/o HTN – 70-80mmHg
  - H/O HTN – 80mmHg
- If MAP goes below range
  - Okay to use Phenylephrine prn
  - Okay to use Glycopyrrolate prn
  - Do **NOT** use ephedrine as a pressor
- If MAP goes above range
  - Adjust Sevoflurane to max end expired of 2%
  - Augment with Study Drug (**Labetolol** vs **Esmolol**) Based on Designation

**MAP Control Medications** – Labetolol
- Obtain 3 bottles Labetolol (100mg/10mL)
- Aliquots of 20mg of Labetol prn MAP >80 and Sevoflurane 2%
- Maximum Dose – 300mg total for case
- Anesthesiologist Discretion for drug agents after maximal dose is reached

**MAP Control Medications** – Esmolol
- Obtain 2500mg/20mL vial and Dilute in 250mL of 0.9% Normal Saline
- Provides a 10mg/mL Solution
- Infusion – 0.1mg/kg/min if MAP > 80 and Sevoflurane 2%
- Maximum Dose – after 30 minutes, 0.3mg/kg/min
- Anesthesiologist Discretion for drug agents after maximal dose is reached