

Q: Patient undergoing strabismus surgery and develops bradycardia. What do you do?

Tx:

1. Release muscle immediately and wait.
2. May need to give atropine 0.4mg for an adult

Q: Patient later develops tachycardia and trismus. What do you do?

Treatment of Malignant Hyperthermia:

causes: succinylcholine, halothane, inhalational anesthetics (enflurane, isoflurane)

Procedure:

- 4 things to do: stop OR, hyperventilate, cool patient, keep urine going
- 4 meds to give: Dantrolene, bicarb, mannitol (+/- Lasix), insulin (with glucose)
- 1) Stop anesthetics immediately and conclude surgery ASAP
- 2) hyperventilate with 100% oxygen (8-10l) and monitor with pulse oximeter
- 3) Dantrolene: 2mg/kg initial bolus with additional 1mg/kg Q5 minutes doses up to total of 10mg/kg
- 4) Arteries: arterial line if possible for: ABG's, temperature, BP
- 5) Veins: electrolytes, PT/PTT/fibrinogen (have IV line)
- 6) Cardiac: EKG
- 7) NaHCO₃: 1-2 mEq/kg increments guided by arterial pH and pCO₂ (also helps K⁺ to enter cell)
- 8) Cool patient:
 - a) IV iced NS 1litre Q 10 min x 3 (total 3 litres); NO Ringer's lactate (has K⁺)
 - b) lavage stomach, bladder, rectum, peritoneal and thoracic cavities
 - c) cool skin with ice and hypothermia blanket
- 9) maintain urine output (should be at least 2 cc/kg/h (150 cc/ hour) to prevent renal damage from myoglobin)
 - a) insert catheter to monitor urine output
 - b) mannitol 20 g IV (100 cc of 20%) (x 4 max)
 - c) Lasix (furosemide): 1 mg/kg IV (x 4 max)
- 10) check potassium
 - a) if hyperkalemia ∩ give 10 units insulin with 50 cc of D50 ampule
 - b) recheck potassium and glucose

Notes

- 1) Don't give calcium channel blockers
- 2) continue dantrolene for 3 days at 1mg/kg IV Q6h
- 3) Swan Ganz inserted if necessary
- 4) For arrhythmias: Procainamide: 1g over 10 minutes

Signs of MH

1. Metabolic acidosis, tachycardia, hyperK, hyperCa
2. Hypercarbia, increase myoglobin
3. Trismus, muscle contraction