Malignant Hyperthermia...Not Just for the OR
MH Workgroup
Quality, Safety, and Risk Prevention

Causes:
Malignant Hyperthermia (MH) is a potentially fatal, inherited disorder usually associated with the administration of certain general anesthetics and/or the drug succinylcholine.

When MH is diagnosed you must treat immediately.

MH is characterized by the uncontrolled release of calcium from the sarcoplasmic reticulum into the myoplasm.

Signs and Symptoms:
- Masseter muscle rigidity
- Increase end tidal CO2
- Tachycardia
- High body temperature
- Acidosis
- Rhabdomyolysis
- Hypercarbia
- Hyperkalemia

Nursing Care:

Immediate Nursing Actions:
- Call 1-1111 tell LifeFlight you have a patient w/ malignant hyperthermia and location
- Increase oxygen
- Get the crash cart
- Obtain ice and start making ice packs (groin and axilla)
- Place patient on a monitor
- Document on a code sheet
- Intubation
- Insert Foley and/or NG tube
- Obtain temperature probe

Post stabilization patient will be treated in ICU:
- Dantrolene drip
- Manage metabolic acidosis
- Monitor urine output
- Monitor electrolytes
- Administer diuretics

Malignant Hyperthermia Kit Update:

<table>
<thead>
<tr>
<th>Section</th>
<th>Current Information</th>
<th>Recommended Addition(s) or Change(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name of Kit/Cart</td>
<td>Malignant Hyperthermia Kit—Adult</td>
<td>Malignant Hyperthermia Kit—Pediatric</td>
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<tr>
<td>Contents of Kit/Cart</td>
<td>Adult: Calcium Chloride 10%, 100 mg / 1 ml, 10 ml, Syringe x 2; Dantrolene 20 mg / 10 ml, Vial x 10; Furosemide 100 mg / 1 ml, Vial x 2; Sterile Water 50 ml, Vial x 8; Pediatric: Calcium Chloride 10%, 100 mg / 1 ml, 10 ml, Syringe x 2; Dantrolene 20 mg / 10 ml, Vial x 10; Furosemide 100 mg / 1 ml, Vial x 2</td>
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Medication:
Ryanodex (dantrolene)
- Add 5ml sterile water to 250mg vial of Ryanodex
- Shake the vial until medication is dissolved, should take less than 10 seconds and will be orange in color
- Administer IV push

Cart Location Algorithm:

Cart Accessibility Drill:

Next Steps:
- Projected Go-Live Summer 2016
- New fully stocked MH Carts (medication and supplies)
- Malignant Hyperthermia Drill at VUH

References: