

# DANTROLENE FOR MALIGNANT HYPERTHERMIA

## Emergency Department Use

These instructions are specifically for the malignant hyperthermia (MH) recognized outside of the perioperative area. These instructions are derived from the Policy "Care of Patient with Malignant Hyperthermia". Please see Policy for full details.

### PHYSICIAN ROLE

---

- **Identify** patient with signs/symptoms of malignant hyperthermia:

Early signs/symptoms	Early Biochemical changes	Late signs/symptoms	Late biochemical changes
<ul style="list-style-type: none"><li>• Masseter muscle rigidity</li><li>• Generalized muscle rigidity</li><li>• Tachycardic dysrhythmia</li><li>• Increase body temperature</li><li>• Tachypnea</li><li>• Cyanosis/skin mottling</li></ul>	<ul style="list-style-type: none"><li>• Hypercarbia</li><li>• Acidosis (respiratory/metabolic)</li><li>• Hyperkalemia</li><li>• Hyper/hypo-calcemia</li><li>• hyperglycemia</li></ul>	<ul style="list-style-type: none"><li>• Dark brown urine</li><li>• Bleeding/oozing from wound sites</li></ul>	<ul style="list-style-type: none"><li>• Elevated CK (peak 12-24 hours)</li><li>• Myoglobinuria</li><li>• Prolonged PT/PTT</li><li>• Thrombocytopenia</li><li>• Elevated liver enzymes</li></ul>

- **Call 111** and alert the operator to "activate code malignant hyperthermia"
- **Call 2-1500** to speak to Department of Anesthesia
  - Anesthesia provider will report to the MH emergent location with the Malignant Hyperthermia Cart from the OR on E level
- **Order** dantrolene injection in Epic
- **Assign a nurse** to retrieve and prepare dantrolene from ED TRAUMA Pyxis while the Malignant Hyperthermia Cart is en route
- Once arrived, the Anesthesia Provider will coordinate treatment activities

### NURSE ROLE

---

- Report to **ED TRAUMA Pyxis**
- Retrieve or override "dantrolene" and take the following items from the Pyxis drawer and bring them to the area of MH emergent location
  - 3 vials of dantrolene (250 mg per vial)
  - 3 vials of diluent (5 mL sterile water per vial)

### DOSING & ADMINISTRATION

---

- Dissolve each **250 mg vial of dantrolene** with **5 mL SWFI** (diluent provided) using a 10 mL syringe and shake until the solution is clear
  - Withdraw appropriate dose into syringe and administer as IV push
- Dose: **2.5 mg/kg IV push** through large bore IV
  - Repeat bolus every 5-15 minutes as needed until symptoms subside or max cumulative dose is reached (10 mg/kg)
  - **See dosing recommendations on the back of this document**

# Dantrolene Dosage Chart for Malignant Hyperthermia

Based on recommended loading dose of 2.5 mg/kg

Chart calculated using 250 mg vials of dantrolene reconstituted with 5 mL Sterile Water  
(Final concentration will be 50 mg/mL)

Patient weight (kg)	Number of vials of dantrolene needed	Milligram (mg) of dantrolene per dose	Milliliter (mL) of reconstituted dantrolene to administer per dose
20	1	50 mg	1 mL
25	1	62.5 mg	1.25 mL
30	1	75 mg	1.5 mL
35	1	87.5 mg	1.75 mL
40	1	100 mg	2 mL
45	1	112.5 mg	2.25 mL
50	1	125 mg	2.5 mL
55	1	137.5 mg	2.75 mL
60	1	150 mg	3 mL
65	1	162.5 mg	3.25 mL
70	1	175 mg	3.5 mL
75	1	187.5 mg	3.75 mL
80	1	200 mg	4 mL
85	1	212.5 mg	4.25 mL
90	1	225 mg	4.5 mL
95	1	237.5 mg	4.75 mL
100	1	250 mg	5 mL
105	2	262.5 mg	5.25 mL
110	2	275 mg	5.5 mL
115	2	287.5 mg	5.75 mL
120	2	300 mg	6 mL
125	2	312.5 mg	6.25 mL
130	2	325 mg	6.5 mL
135	2	337.5 mg	6.75 mL
140	2	350 mg	7 mL
145	2	362.5 mg	7.25 mL
150	2	375 mg	7.5 mL