**Malignant Hyperthermia (MH)**

Disclaimer: This algorithm has been developed for MD Anderson using a multidisciplinary approach considering circumstances particular to MD Anderson’s specific patient population, services and structure, and clinical information. This is not intended to replace the independent medical or professional judgment of physicians or other health care providers in the context of individual clinical circumstances to determine a patient’s care. This algorithm should not be used to treat pregnant women.

**A INITIAL EVALUATION**

- MH team lead (anesthesiologist)\(^4\) assembles crisis team
- Assigns MH team member roles
- Assists with drawing arterial blood gases (ABG) as needed
- Calls MH hotline (800-644-9737)

**MH confirmed?**

- If MH suspected, page Anesthesiologist\(^1\) and notify Central Pharmacy\(^2\) STAT
- Bring MH cart\(^2\) to bedside

- Monitor in current location and make arrangements for patient to transfer to higher level of care, if needed
- Notify ICU/PICS regarding possible transfer

**ACUTE PHASE TREATMENT**

**Cooling team member:**
- Initiates cooling process only if patient’s temperature exceeds 39°C
- Brings cold NS and ice, packs IV NS bags in ice for infusion
- Prepares ice packs
- **Surface cooling measures:**
  - Ice packs to body surfaces
  - Cooling blankets, sets temperature at 32°C if available
- **Internal cooling measures:**
  - NG tube for stomach lavage using cold NS
  - Indwelling foley catheter for irrigation using cold NS
  - Continuously monitors patient’s temperature
  - Discontinues cooling measures when temperature decreases to 38°C

**Dantrolene team member:**
- Administers dantrolene 2.5 mg/kg IV push
- Repeats dose per Anesthesia request until symptoms subside or a cumulative dose of 10 mg/kg is reached (note: up to 30 mg/kg may be needed)

- **Medication team member:**
  - Assists with preparation and administration of dantrolene and other medications
  - **Primary nurse:**
    - Maintains documentation of all medications administered, procedures performed, and continued patient assessment
    - Infuses cold NS intravenously
    - Inserts NG tube for cold NS lavage
    - Assists MH team leader
  - **Labs:** arterial blood gases, electrolytes, creatine kinase, myoglobin, coagulation studies, and additional labs as clinically indicated
  - **Department of Clinical Effectiveness:**
    - Requests transfer to higher level of care
    - Notify ICU/PICS regarding transfer
    - Complete a safety intelligence (SI) report
    - Report to Malignant Hyperthermia Association of the United States (MHAUS)
      - Call MH hotline (800-644-9737)
    - Provide patient education regarding MH and future precautions
    - Perform ongoing evaluation for signs and symptoms of MH (see box A)

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\(^1\) Anesthesia:  
- Anesthesia control room  
  713-792-2524  
  (M-F 0600-2100)
- Anesthesia airway pager  
  713-404-2946  
  (after hours and weekends)
- ACB Anesthesia  
  713-834-4520

\(^2\) Main OR Pharmacy:  
- 713-794-1258  
  (M-F 0600-2300)  
- 713-404-2946 (pager)

\(^3\) MH cart locations:
- **Main building**
  - Main OR
  - GS PACU
  - P 3.3028
- **Mays building**
  - ACB PACU room ACB 4.1951
  - Anesthesia storage room ACB 4.2517
  - Proton center
  - PTCB.2075

\(^4\) Anesthesia providers may refer to the Optime Malignant Hyperthermia Intra-op Care Guidelines in OneConnect for an additional reference regarding management of patients with MH

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Department of Clinical Effectiveness V2
SUGGESTED READINGS


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DEVELOPMENT CREDITS

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