

**MALIGNANT HYPERTHERMIA PREPAREDNESS: A MULTIDISCIPLINARY APPROACH AIMED AT THE RECOGNITION AND MANAGEMENT OF A MALIGNANT HYPERTHERMIA CRISIS DURING SURGERY AND OTHER INVASIVE PROCEDURES**

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**Background Information:** Malignant hyperthermia (MH) is a rare and potentially fatal inherited disorder which may be induced by certain inhaled anesthetics and/or the depolarizing muscle relaxant succinylcholine. Early recognition of the signs and symptoms and a rapid coordinated team response of a MH crisis can improve the survival rate of patients undergoing surgical intervention and other invasive procedures.

**Objectives of Project:**

1. To develop standard guidelines, checklists and cognitive aids for the recognition and treatment of a MH crisis.
2. To educate regarding emergency drugs and equipment needed for the treatment of MH crisis and to standardize the MH cart across all areas.
3. To develop the MH team SME (subject matter experts) members and develop a standardized response plan for a MH crisis
4. To develop a standardized MH learning module for all perioperative staff throughout BCH and its satellite facilities

**Process of Implementation:**

1. Conducted literature review to identify current guidelines and best practices.
2. A standardized response process and checklist were developed.
3. An educational program and a simulation scenario were developed and implemented for all perioperative staff.
4. A standardized order set for MH labs has been implemented. A review of the documentation process is underway.
5. A standardized MH binder that contains a MH inventory sheet which details the contents of the MH cart was developed for every unit.

**Statement of Successful Practice:** Staff reported that they are able to immediately access tools and equipment in the same manner throughout the healthcare system. A standardized process helps to ensure best outcomes and prevent errors.

**Implications for Advancing the Practice of Perianesthesia Nursing:** Interdisciplinary team involvement and good team communication is vital to the success of any perioperative program. As MH is a rare event, we need to educate frequently and practice to maintain an optimal team response. Debriefing after simulation allows us to identify what worked best and what we could do better, so that if an event occurs, a timely and coordinated response occurs.