

## **UNDERSTANDING MALIGNANT HYPERTHERMIA**

Team Leader: Magdalena G. Smith MA RN OCN  
New York-Presbyterian Hospital, New York, New York  
Team Member: Melissa Alford BSN RN

**Background Information:** Malignant hyperthermia is a rare inherited muscles disorder characterized by disturbance of calcium homeostasis in skeletal muscle triggered by certain anesthetic agents. A malignant hyperthermia (MH) crisis is a medical emergency and if it is not recognized and treated immediately can lead to serious medical complications or even result to death.

Perioperative nurses should perform MH risk assessments during routine preoperative interviews to identify patients at risk for MH crisis.

The goal of this project is to provide the perioperative nurses with the current, clinically useful information on Malignant Hyperthermia (MH).

### **Objectives of Project:**

1. Identify statistics, triggers, and pathophysiology of Malignant Hyperthermia.
2. Discuss the current status of screening, diagnostic tests, and clinical manifestations of Malignant Hyperthermia.
3. Describe the treatment and nursing interventions for Malignant Hyperthermia crisis.

**Process of Implementation:** The perioperative staff identified the need to increase the perioperative nurses awareness on Malignant Hyperthermia. With collaboration with the Nursing Educator, in-service with contact hour was given on MH to the staff. To enhance the knowledge on MH, a poster was developed and presented at the hospital Skills Fair.

**Statement of Successful Practice:** The MH poster has helped increased staff awareness and knowledge based on MH. The MH is part of staff annual learning module that the Perioperative nurses are required to read.

**Implications for Advancing the Practice of Perianesthesia Nursing:** With the increased knowledge base on MH, the perioperative nurses take a proactive role in assessing, eliciting information about MH of patients and communicate finding with other health care providers.