

Nurse Anesthetist in Assisting Anesthesiologist in Providing Anesthetics to a Patient Whose or with Family History Related to the Occurrence of Malignant Hyperthermia (MH).

Jommaronge P, B.N.,* Srichintai P, M.D.*

*Department of Anesthesiology, Faculty of Medicine, Ramathibodi Hospital , Mahidol University , Bangkok 10400

Malignant hyperthermia (MH) is a pharmacogenetic disorder of skeletal muscle, manifested as a life-threatening hypermetabolic crisis after exposure to triggering anesthetic agent and possibly by other components or sensitivity to the anomaly of catecholamine resulting in abnormal secretion of calcium from sarcoplasmic reticulum (SR). This leads to severe contraction causing hypermetabolism, high fever and acute acidosis. It has an impact on highly mortality rate.

The author assisted an anesthesiologist to administer anesthesia to a 39 year old female patient whose family history is related to the occurrence of MH. Her elderly brother died from proven MG during anesthesia which was given for cholecystectomy due to cystic mass of gall bladder. The patient was diagnosed to have neurilemma at the second cervical spine (C 2) and herniated disc of the c-spine level 3-4 and 5-6. She was scheduled for laminectomy with tumor removal maintenance anesthesia under GA.

The patient was visited by anesthesiologist and team for preoperative evaluation and preparation, advised for perioperative care to minimize any complication. In order to maintain anesthesia, N₂O and oxygen fentanyl 100 microgram, pancuronium, midazolam was given together with propofol infusion to keep blood pressure range between 110-130/60-80 mmHg, and the end-tidal CO₂ was 30-35 mmHg. Estimated blood loss was about 200 milliliter. Crystalloid fluid replacement was about 2600 ml, Anesthesia time was about 6 hours. She was still intubated and observed closely in ICU. After the extubation was done, the patient was discharged from hospital within 8 days after the operation without any complication.