

Emergency Room Precautions for Neuro-Muscular Disease

USE CAUTION in administering

- * Anesthesia (1)
- * Narcotics (2)
- * Stimulants (3)
- * Supplemental O₂ (4)

Be prepared to intubate!

Patients with **neuro-muscular disease** are subject to...

- (1) Malignant Hyperthermia caused by certain anesthetics.
- (2) Restrictive Lung Disease caused by weak respiratory muscles.
- (3) Tachycardia (high pulse rate).
- (4) Hypopnea (shallow breathing) and hypercapnia (CO₂ retention).

Supplemental Oxygen

DO NOT administer supplemental O₂ for sustained periods without CONSTANT monitoring of EtCO₂ with a capnograph. EtCO₂>43 mmHg indicates CO₂ retention. Administration of O₂ can cause CO₂ to rise, resulting in hypercapnia, coma, and **DEATH!**

Sustained hypercapnia (EtCO₂>43) requires mechanical ventilatory assistance. Use **noninvasive ventilation** via mouthpiece or nasal interface with high-span Bi-PAP (typ. 18/2, rate 10) or volume vent (typ. 1000 ml, rate 10, command/assist mode). If unconscious, intubation may be required.

Also see: **Severe hypercapnia after low-flow oxygen therapy...**

For additional information,

See: www.DoctorBach.com/ER

Or call: Millennium at 1-800-269-9436 / (973) 463-1880

PDR - Verify Drug Side-Effects

Use the Physician's Desk Reference or **MedLine Plus Drug Information** to verify known side-effects before administering drugs. Watch for warnings and cautions related to **neuro-muscular disease**, *muscular dystrophy*, *malignant hyperthermia*, *lung disease*, *tachycardia*, etc.

Anesthetics

General anesthesia is accompanied by a number of important risks. When general anesthesia is required in order to undergo a specific procedure, succinylcholine and inhalational anesthetics need to be AVOIDED.

Also see:

Anesthesia in Children With Muscular Dystrophy
Preventing Malignant Hyperthermia - An Anesthesia Protocol

Note: Patients with muscular dystrophy will likely have preexisting elevated CK level and tachycardia!

UCLA & Malignant Hyperthermia
Coping w/ Anesthesia - NMDs Pose Special Risks, Prep
Minimizes Dangers

Additional Information

American Thoracic Society Consensus Statement -- Respiratory Care of the Patient with Duchenne Muscular Dystrophy (PDF 106k)

This official statement of the American Thoracic Society was approved by the ATS Board of Directors March 2004.

ICU Protocol for Pulmonary Care
Prevention of Pulmonary Morbidity

In memory of Brandon Miller (1981-2001).

"I certainly hope it helps save another boy's life, and I think it will." Brandon's mom.