



## SURGERY WITH NEUROMUSCULAR DISEASE

Patients with any neuromuscular disease experience many challenges with surgeries, including anesthetic issues, and are at greater risk for perioperative complications, including respiratory or cardiovascular dysfunction and pulmonary aspiration.

Avoid the use of nondepolarizing agents, mainly NMBs.

Depolarizing agents are not recommended for any neuromuscular disease. However, succinylcholine may be used with Myasthenia Gravis.

Due to their short-acting and rapid onset features, IV anesthetics (propofol) may also be safely used.

If possible, use local or regional anesthesia. Use amide local anesthetics (ropivacaine, bupivacaine, lidocaine) over ester if you take anticholinesterases (Mestinon).

There is some risk of malignant hyperthermia in all neuromuscular diseases.

### **PATIENTS WITH MYASTHENIA GRAVIS**

Try to avoid surgery when MG symptoms are not controlled.

Do not take magnesium.

Patients will require respiratory monitoring overnight and should consult with a neurology provider if experiencing shortness of breath or muscle weakness.

### **Safe Pre-Op and Post-Op antibiotics:**

- Penicillin
- Cephalosporins
- Metronidazole
- Sulfa drugs

### **Antibiotics to avoid:**

- Aminoglycosides (gentamycin)
- Polymyxins
- Macrolides (azithromycin)
- Fluroquinolones (ciprofloxacin)

### **Medications that may potentially exacerbate weakness:**

- Beta-blockers
- Calcium channel blockers
- Antiepileptics (gabapentin and phenytoin)
- Phenothiazines
- Diuretics
- Procainamide
- Magnesium
- Opioids