Pharmacotherapy

Burn injury induces many different pathological changes in the human body, which can potentially affect the pharmacokinetic and pharmacodynamic parameters of medications. Multiple factors, including alterations in blood flow, plasma protein binding and organ function contribute to these changes.

Parameters such as volume of distribution and clearance may be altered, with the extent of alterations depending on the medication, the type and extent of the burn injury and the time that elapsed between injury and medication administration. Volume of distribution (Vd) may change as a consequence of altered protein binding or an increased extracellular fluid volume. Alterations in clearance may be due to changes in hepatic blood flow, drug metabolizing activity, glomerular filtration, tubular filtration, protein binding and the presence of additional elimination.

Since significant changes in pharmacokinetic disposition may occur following burn injury, therapeutic drug monitoring and dosage adjustment are required to ensure a safe and effective pharmacotherapy.

Directory for Protocols:

- Alcohol Withdrawal Therapy
- Antibiotic Protocol for LAC+USC Burn Unit
- Ascorbic Acid Therapy (Intravenous)
- Bowel Regimens
- Colistin (as colistimethate Sodium) Protocol (Intravenous) & Monitoring Form
- Endotracheal Antibiotic Protocol (Aminoglycosides, Colistin)
- GI Prophylaxis
- Haloperidol Protocol (Intravenous)
- Heparin Aerosolized <u>+</u> Acetylcysteine for Inhalation Burn
- Immune Globulin (IVIG) For Toxic Epidermal Necrolysis
- Insulin Regular Continuous IV Infusion Protocol (Adult)
- Neostigmine for Ogilvie's Syndrome (Intravenous)
- Neuromuscular Blocking Agents
- Oxandrolone Therapy
- Pain Management-Overview and Table
- Pediatric CPR Worksheet
- Sedation-Overview and Table

Note: Above protocols have been approved only as a guideline for burn patients in LAC+USC Burn Center. Recommendations are current only to the last update date at the bottom of each protocol.

Reference guides

1. Burn pharmacotherapy quick reference guide

Kits available:

1. Cyanokit