

EMRA and ACMT Medical Toxicology Guide

References

GLOBAL

1. Hoffman RS, Howland MA, Lewin NA, Nelson LS, Goldfrank LR, Flomenbaum N. *Goldfrank's Toxicologic Emergencies*. 10th ed. New York, NY: McGraw-Hill Education; 2015.
2. Olson KR. Poisoning and Drug Overdose. 7th ed. New York, NY: McGraw-Hill Education/Medical; 2017.
3. Walls RM, Hockberger RS, Gausche-Hill M, eds. *Rosen's Emergency Medicine: Concepts and Clinical Practice*. 9th ed. Philadelphia, PA: Elsevier; 2018.
4. Lugassy D. Clinical Toxicology, An Issue of Emergency Medicine Clinics of North America, Volume 32-1. Cambridge, MA: Elsevier; 2014.
5. Brent J, Burkhardt K, Dargan P, Hatten B, Megarbane B, Palmer R, White J. *Critical Care Toxicology*. 2nd ed. Basel, Switzerland: Springer International Publishing; 2017.
6. Greenwood J. *PressorDex®*. 3rd ed. Dallas, TX: Emergency Medicine Residents' Association; 2017.
7. Auerbach PA, Cushing TA, Harris NS. *Auerbach's Wilderness Medicine*. 7th ed. Philadelphia, PA: Elsevier; 2017.

APPROACH TO POISONED PATIENT

1. Benson BE, Hoppu K, Troutman WG, et al. Position paper update: gastric lavage for gastrointestinal decontamination. *Clin Toxicol (Phila)*. 2013;51(3):140-146.
2. Chyka PA, Seger D, Krenzelok EP, Vale JA, American Academy of Clinical Toxicology, European Association of Poison Centres and Clinical Toxicologists. Position paper: Single-dose activated charcoal. *Clin Toxicol (Phila)*. 2005;43(2):61-87.
3. Thanacoody R, Caravati EM, Troutman B, et al. Position paper update: whole bowel irrigation for gastrointestinal decontamination of overdose patients. *Clin Toxicol (Phila)*. 2015;53(1):5-12.
4. Daly FF, Little M, Murray L. A risk assessment based approach to the management of acute poisoning. *Emerg Med J*. 2006;23(5):396-399.
5. Boyle JS, Bechtel LK, Holstege CP. Management of the critically poisoned patient. *Scand J Trauma Resusc Emerg Med*. 2009;17:29.
6. Ranniger C, Roche C. Are one or two dangerous? Calcium channel blocker exposure in toddlers. *J Emerg Med*. 2007;33(2):145-154.
7. Sachdeva DK, Stadnyk JM. Are one or two dangerous? Opioid exposure in toddlers. *J Emerg Med*. 2005;29(1):77-84.
8. Matteucci MJ. One pill can kill: assessing the potential for fatal poisonings in children. *Pediatr Ann*. 2005;34(12):964-968.
9. Thomas TJ, Pauze D, Love JN. Are one or two dangerous? Diphenoxylate-atropine exposure in toddlers. *J Emerg Med*. 2008;34(1):71-75.
10. Spiller HA, Bosse GM, Beuhler M, Gray T, Baker SD. Unintentional ingestion of bupropion in children. *J Emerg Med*. 2010;38(3):332-336.
11. Rivas-Coppola MS, Patterson AL, Morgan R, Wheless JW. Bupropion Overdose Presenting as Status Epilepticus in an Infant. *Pediatr Neurol*. 2015;53(3):257-261.
12. Verelst S, Vermeersch P, Desmet K. Ethylene glycol poisoning presenting with a falsely elevated lactate level. *Clin Toxicol (Phila)*. 2009;47(3):236-238.

ALCOHOLS

Ethanol

1. Vonghia L, Leggio L, Ferrulli A, Bertini M, Gasbarrini G, Addolorato G. Alcoholism Treatment Study Group. Acute Alcohol Intoxication. *Eur J Intern Med*. 2008;19(8):561-567.
2. Addolorato G, Ancona C, Capristo E, Gasbarrini G. Metadoxine in the Treatment of Acute and Chronic Alcoholism: A Review. *Int J Immunopathol Pharmacol*. 2003;16(3):207-214.

3. Lieber CS. Medical Disorders of Alcoholism. *N Engl J Med.* 1995;333(16):1058-1065.
4. Gerrity RS, Pizon AF, King AM, Katz KD, Menke NB. A patient with alcoholic ketoacidosis and profound lactemia. *J Emerg Med.* 2016;51(4):447-449.

Alcohols (Ethylene Glycol, Isopropanol, Methanol, Propylene Glycol)

1. Beauchamp G, Valento, M. Toxic alcohol ingestion: prompt recognition and management in the emergency department. *Emerg Med Pract.* 2016;18(9):1-20.
 2. Lippincott. Ethylene Glycol, Methanol, Isopropanol, acetone, and other glycols. In: Lippincott's Manual of Toxicology. Philadelphia, PA: Wolters Kluwer; 2012: 34-51.
 3. Beatty L, Green R, Magee K, Zed P. A systematic review of ethanol and fomepizole use in toxic alcohol ingestions. *Emergency Medicine International.* 2013:1-14.
 4. McMartin K, Jacobsen D, Hovda KE. Antidotes for poisoning by alcohols that form toxic metabolites. *Br J Clin Pharmacol.* 2016;81(3):505-515.
- Wilson KC, Reardon C, Theodore AC, Farber HW. Propylene Glycol Toxicity: A Severe Iatrogenic Illness in ICU Patients Receiving IV Benzodiazepines: A Case Series and Prospective, Observational Pilot Study. *Chest.* 2005;128(3):1674-1681.
5. Dawling S. Overdose of Propylene Glycol. Decision Support in Medicine. Accessed on Aug. 7, 2018.

BIOTERRORISM AGENTS

1. Adalja AA, Toner E, Inglesby TV. Clinical Management of Potential Bioterrorism Related Conditions. *N Engl J Med.* 2015;372(10):954-962.
2. Centers for Disease Control and Prevention (CDC). Anthrax: Medical Care Prevention. Available at <https://www.cdc.gov/anthrax/medical-care/prevention.html>.
3. Dennis DT, Inglesby TV, Henderson DA, et al. Consensus Statement: Tularemia as a Biological Weapon: Medical and Public Health Management. *JAMA.* 2001;285(21):2763-2773.
4. Grey MR, Spaeth KR. The Bioterrorism Sourcebook. New York, NY: McGraw-Hill; 2006.
5. Inglesby TV, Dennis DT, Henderson DA, et al. Plague as a Biological Weapon: Medical and Public Health Management. *JAMA.* 2000;283(17):2281-2290.

Radiation

1. Alexander GA. Radiation Decontamination. In: Ciottone GR, Biddinger PD, Darling RG, et al, eds. Ciottone's Disaster Medicine. 2nd ed. Philadelphia, PA: Elsevier; 2016:519-523.
2. Linder JA, Linder LS. Radiation Accident - Dispersed Exposure. In: Ciottone GR, Biddinger PD, Darling RG, et al, eds. Ciottone's Disaster Medicine. 2nd ed. Philadelphia, PA: Elsevier; 2016:630-634.
3. Molé DM. Introduction to Nuclear and Radiological Disasters. In: Ciottone GR, Biddinger PD, Darling RG, et al, eds. Ciottone's Disaster Medicine. 2nd ed. Philadelphia, PA: Elsevier; 2016:615-619.
4. Linder JA, Linder LS. Radiation Accident - Isolated Exposure. In: Ciottone GR, Biddinger PD, Darling RG, et al, eds. Ciottone's Disaster Medicine. 2nd ed. Philadelphia, PA: Elsevier; 2016:625-629.
5. Module Seven Radiation Emergencies. American College of Medical Toxicology. http://www.acmt.net/Module_Seven.html. Accessed August 20, 2017.
6. Acosta R, Warrington SJ. Radiation, Syndrome Acute. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2017 June. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK441931/>
7. Singh VK, Garcia M, Seed TM. A review of radiation countermeasures focusing on injury-specific medicinals and regulatory approval status: part II. Countermeasures for limited indications, internalized radionuclides, emesis, late effects, and agents demonstrating efficacy in large animals with or without FDA IND status. *Int J Radiat Biol.* 2017;93(9):870-884.

8. Waselenko JK. Medical Management of the Acute Radiation Syndrome: Recommendations of the Strategic National Stockpile Radiation Working Group. *Ann Intern Med.* 2004;140(12):1037-1051.
9. Cerezo L. Radiation accidents and incidents. What do we know about the medical management of acute radiation syndrome? *Rep Pract Oncol Radiother.* 2011;16(4):119-122.
10. Port M, Pieper B, Knie T, et al. Rapid Prediction of Hematologic Acute Radiation Syndrome in Radiation Injury Patients Using Peripheral Blood Cell Counts. *Radiat Res.* 2017;188(2):156-168.

CAUSTICS

Alkali

1. Chibishev A, Pereska Z, Chibisheva V, Simonovska N. Corrosive Poisonings in Adults. *Mater Sociomed.* 2012;24(2):125-130.
2. Riffat F, Cheng A. Pediatric caustic ingestion: 50 consecutive cases and a review of the literature. *Dis Esophagus.* 2009;22(1):89-94.
3. Zargar SA, Kochhar R, Nagi B, Mehta S, Mehta SK. Ingestion of strong corrosive alkalis: spectrum of injury to upper gastrointestinal tract and natural history. *Am J Gastroenterol.* 1992;87(3):337-341.

Hydrofluoric Acid

1. Bertolini JC. Hydrofluoric Acid: A Review of Toxicity. *J Emerg Med.* 1992;10(2):163-168.
2. Bosse GM, , Matyunas NJ. Delayed Toxicomes. *J Emerg Med.* 1999;17(4):679-690.
3. Kirkpatrick JJ, Enion DS, Burd DA. Hydrofluoric Acid Burns: A Review. *Burns.* 1995;21(7):483-493.
4. Sheridan RL, Ryan CM, Quinby WC Jr, Blair J, Tompkins RG, Burke JF. Emergency Management of Major Hydrofluoric Acid Exposures. *Burns.* 1995;21(1):62-64.
5. Tsionis L, Hantsch-Bardsley C, Gamelli RL. Hydrofluoric Acid Inhalation Injury. *J Burn Care Res.* 2008;29(5):852-855.

Strong Acids (sulfuric, hydrochloric)

1. Boyce SH, Simpson KA. Hydrochloric acid inhalation: who needs admission? *J Accid Emerg Med.* 1996;13(6):422-424.
 2. Finnegan MJ, Hodson ME. Prolonged hypoxaemia following inhalation of hydrogen chloride vapor. *Thorax.* 1989;44(3): 238-239.
 3. Gabrielli A, Layon AJ, Yu M, eds. Civetta, Taylor & Kirby's Critical Care. 4th ed. Philadelphia, PA: Lippincott, Williams & Wilkins; 2009.
 4. National Research Council (US) Subcommittee on Rocket-Emission Toxicants. Assessment of Exposure-Response Functions for Rocket-Emission Toxicants. Washington, DC: National Academies Press; 1998.
- Olson KR, Borak J, eds. Managing Hazardous Materials Incidents: Medical Management Guidelines for Acute Chemical Exposures. Vol. 3. Washington, DC: Agency for Toxic Substances Disease & Registry; 1996.

ENVENOMATIONS/POISONING-MARINE

1. Abo B. Management of Animal Bites and Envenomations. In Hawkins SC, ed. *Wilderness EMS.* Philadelphia, PA: Wolters Kluwer; 2018.
2. White J. *Clinician's Guide to Australian Venomous Bites and Stings: Incorporating the updated CSL Antivenom Handbook.* Victoria, Australia: bioCSL Pty Ltd; 2013.
3. Currie BJ. Marine Antivenoms. *J Toxicol Clin Toxicol.* 2003;41(3):301-308.
4. Auerbach P. Marine Envenomations. *N Engl J Med.* 1991;325(7):486-493.
5. Diaz JH. Marine Scorpaenidae Envenomation in Travelers: Epidemiology, Management, and Prevention. *J Travel Med.* 2015;22(4):251-258.

6. Fenner P. Marine envenomation: An update - A presentation on the current status of marine envenomation first aid and medical treatments. *Emerg Med Australasia*. 2000;12(4):295-302.
7. Hornbeak K, Auerbach P. Marine Envenomation. *Emerg Med Clin North Am*. 2017;35(2):321-337.
8. Li L, McGee RG, Isbister G, Webster AC. Interventions for the symptoms and signs resulting from jellyfish stings. *Cochrane Database Syst Rev*. 2013;(12):CD009688.
9. McGoldrick J, Marx JA. Marine envenomations. Part 1: Vertebrates. *J Emerg Med*. 1991;9(6):497-502.
10. McGoldrick J, Marx JA. Marine envenomations. Part 2: Invertebrates. *J Emerg Med*. 1992;10(1):71-77.
11. Mullins ME, Hoffman RS. Is Mannitol the Treatment of Choice for Patients with Ciguatera Poisoning? *Clin Toxicol (Phila)*. 2017;55(9):947-955.
12. Ostermayer DG, Koyfman A. What is the most effective treatment for relieving the pain of a jellyfish sting? *Ann Emerg Med*. 2015;65(4):432-433.
13. Nickson CP, Waugh EB, Jacups SP, Currie BJ. Irukandji Syndrome Case Series From Australia's Tropical Northern Territory. *Ann Emerg Med*. 2009;54(3): 395-403.
14. Ward NT, Darracq MA, Tomaszewski C, Clark RF. Evidence-based Treatment of Jellyfish Stings in North America and Hawaii. *Ann Emerg Med*. 2012;60(4):399-414.
15. Vasconcelos V. Emerging Marine Toxins. *Marine Drugs*. 2015;13(4).
16. Peterson M, Talcott PA. Small Animal Toxicology. 3rd ed. Philadelphia, PA: Saunders; 2012.
17. Taylor SL. Marine toxins of microbial origin. *Food Tech*. 1988;53(3):964-998.
18. Tortorella V, Masciari P, Pezzi M, et al. Histamine poisoning from ingestion of fish or scombroid syndrome. *Case Rep Emerg Med*. 2014;2014:482531.

ENVENOMATIONS-NON-MARINE

Arachnids & Hymenoptera

1. Abo B. Management of Animal Bites and Envenomations. In Hawkins SC, ed. *Wilderness EMS*. Philadelphia, PA: Wolters Kluwer; 2018.
2. Shackelford R, Veillon D, Maxwell N, LaChance L, Jusino T, Cotelingam J, Carrington P. The black widow spider bite: differential diagnosis, clinical manifestations, and treatment options. *J La State Med Soc*. 2015;167(2):74-78.
3. Boyle RJ, Elremeli M, Hockenhull J, Cherry MG, Bulsara MK, Daniels M, Oude Elberink JN. Venom Immunotherapy for Preventing Allergic Reactions to Insect Stings. *Cochrane Database Syst Rev*. 2012;10:CD008838.
4. Erickson TB, Cheema N. Arthropod Envenomation in North America. *Emerg Med Clin North Am*. 2017;35(2):355-375.
5. Peterfy RJ, Khazaeni B. Toxicity, Scorpions. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2017 June. Available from <https://www.ncbi.nlm.nih.gov/books/NBK430928/>.
6. Rahmani F, Khojasteh SMB, Bakhtavar HE, Rahmani Farnaz, Nia KS, Faridaalaee G. Poisonous Spiders: Bites, Symptoms, and Treatment; an Educational Review. *Emerg (Tehran)*. 2014;2(2):54-58.
7. Shaker MS, Hsu D, Gruenberg DA. An update on venom allergy. *Curr Opin Pediatr*. 2013;25(5):629-634.
8. LoVecchio F, Cannon RD, Algier J, Ruha AM, Curry SC, Wallace KL, Graeme KA. Bee swarmings in children. *Am J Emerg Med*. 2007;25(8):931-933.
9. Silva GA, Pires KL, Soares DC, Ferreira MR, Ferry FR, Motta RN, Azevedo MC. RRH: envenoming syndrome due to 200 stings from Africanized honeybees. *Rev Inst Med Trop Sao Paulo*. 2013;55(1):61-64.

Scorpions

1. Abo B. Management of Animal Bites and Envenomations. In Hawkins SC, ed. *Wilderness EMS*. Philadelphia, PA: Wolters Kluwer; 2018.
2. White J. *Clinician's Guide to Australian Venomous Bites and Stings: Incorporating the updated CSL Antivenom Handbook*. Victoria, Australia: bioCSL Pty Ltd; 2013.
3. Abella A. Arizona Bark Scorpion – Centruroides sculpturatus. BugGuide.Net. August 24, 2013.
4. Boyer LV, Theodorou AA, Berg RA, et al. Antivenom for Critically Ill Children with Neurotoxicity from Scorpion Stings. *N Engl J Med*. 2009;360(20):2090-2098.
5. Chippaux JP. Emerging options for the management of scorpion stings. *Drug Des Devel Ther*. 2012;6:165-173.
6. Curry SC, Vance MV, Ryan PJ, Kunkel DB, Northey WT. Envenomation by the scorpion Centruroides sculpturatus. *J Toxicol Clin Toxicol*. 1983-1984;21(4-5):417-449.
7. Dart RC. Medical Toxicology. 3rd ed. Philadelphia, PA: Lippincott, Williams & Wilkins; 2004.
- Gibly R, Williams M, Walter FG, McNally J, Conroy C, Berg RA. Continuous intravenous midazolam infusion for Centruroides exilicauda scorpion envenomation. *Ann Emerg Med*. 1999;34(5):620-625.
9. LoVecchio F, McBride C. Scorpion envenomations in young children in central Arizona. *J Toxicol Clin Toxicol*. 2003;41(7):937-940.
10. O'Connor A, Ruha AM. Clinical Course of Bark Scorpion Envenomation Managed Without Antivenom. *J Med Toxicol*. 2012;8(3):258-262. doi:10.1007/s13181-012-0233-3.
11. Rodrigo C, Gnanathasan A. Management of scorpion envenoming: a systematic review and meta-analysis of controlled clinical trials. *Syst Rev*. 2017;6:74.

Vipers and Elapids

1. Abo B. Management of Animal Bites and Envenomations. In Hawkins SC, ed. *Wilderness EMS*. Philadelphia, PA: Wolters Kluwer; 2018.
2. White J. *Clinician's Guide to Australian Venomous Bites and Stings: Incorporating the updated CSL Antivenom Handbook*. Victoria, Australia: bioCSL Pty Ltd; 2013.
3. Burgess JL, Dart RC. Snake venom coagulopathy: use and abuse of blood products in the treatment of pit viper envenomation. *Ann Emerg Med*. 1991;20(7):795-801.
4. Gold BS, Barish RA, Dart RC. North American snake envenomation: diagnosis, treatment, and management. *Emerg Med Clin North Am*. 2004;22(2):423-443, ix.
5. Lavonas EJ, Ruha AM, Banner W, et al. Unified treatment algorithm for the management of crotaline snakebite in the United States: results of an evidence-informed consensus workshop. *BMC Emergency Medicine*. 2011;11:2.
6. Kanaan NC, Ray J, Stewart M, et al. Wilderness Medical Society Practice Guidelines for the Treatment of Pitviper Envenomations in the United States and Canada. *Wilderness Environ Med*. 2015;26(4):472-487.
7. Wood A, Schauben J, Thundiyil J, et al. Review of Eastern coral snake (*Micruurus fulvius fulvius*) exposures managed by the Florida Poison Information Center Network: 1998-2010. *Clin Toxicol (Phila)*. 2013;51(8):783-788.

HEAVY METALS

Arsenic

1. Cullen NM, Wolf LR, St. Clair D. Pediatric arsenic ingestion. *Am J Emerg Med*. 1995;13(4):432-435.
2. Pakulska D, Czerczak S. Hazardous effects of arsine: a short review. *Int J Occup Med Environ Health*. 2006;19(1):36-44.
3. Agency for Toxic Substances and Disease Registry. Environmental Health and Medicine Education Resources for Health Professionals. Available at https://www.atsdr.cdc.gov/emes/health_professionals/index.html.
4. Toxic Substances Portal – Arsine. Agency for Toxic Substances & Disease Registry. Available at www.atsdr.cdc.gov/MMG/MMG.asp?id=1199&tid=278.

Iron

1. Manoguerra A, Erdman A, Troutman W, et al. Iron ingestion: an evidence-based consensus guideline for out-of-hospital management. *Clin Toxicol (Phila)*. 2005;43(6):553-570.
2. Chang T, Rangan C. Iron poisoning: a literature-based review of epidemiology, diagnosis, and management. *Pediatr Emerg Care*. 2011;27(10):978-985.
3. Madiwale T, Liebelt E. Iron: not a benign therapeutic drug. *Curr Opin Pediatr*. 2006;18(2):174-179.

Lead

1. Bellinger DC, Bellinger AM. Childhood lead poisoning: the tortuous path from science to policy. *J Clin Invest*. 2006;116(4):853-857.
2. Needleman H. Lead poisoning. *Ann Rev Med*. 2004;55:209-222.
3. Alarcon WA, Roscoe RJ, Calvert GM, Graydon JR. Adult blood lead epidemiology and surveillance—United States, 2005–2007. *MMWR Morb Mortal Wkly Rep*. 2009;58(14):365-369.
4. Kosnett MJ, Wedeen RP, Rothenberg SJ, et al. Recommendations for medical management of adult lead exposure. *Environ Health Perspect*. 2007;115(3):463-471.
5. Bradberry S, Sheehan T, Vale A. Use of oral dimercaptosuccinic acid (succimer) in adult patients with inorganic lead poisoning. *QJM*. 2009;102(10):721-732.
6. Gracia R, Snodgrass W. Lead toxicity and chelation therapy. *Am J Health Syst Pharm*. 2007;64(1):45-53.

Mercury

1. Wozniak RJ, Hirsch AE, Bush CR, Schmitz S, Wenzel J. Mercury Spill Responses - Five States, 2012-2015. *MMWR Morb Mort Wkly Rep*. 2017;66(10):274-277.
2. Agency for Toxic Substances and Disease Registry. Medical management guidelines for mercury. Atlanta, GA: US Department of Health and Human Services, Agency for Toxic Substances and Disease Registry, CDC; 2014.
3. Clarkson TW, Magos L, Myers GJ. The Toxicology of Mercury — Current Exposures and Clinical Manifestations. *N Engl J Med*. 2003;349(18):1731-1737.
4. Rafati-Rahimzadeh M, Rafati-Rahimzadeh M, Kazemi S, Moghadamnia A. Current approaches of the management of mercury poisoning: need of the hour. *Daru*. 2014;22:46.

Metal Fume Fever

1. Greenberg M, Vearrier D. Metal fume fever and polymer fume fever. *Clin Toxicol (Phila)*. 2015;53(4):195-203.

Thallium

1. Moore D, House I, Dixon A. Thallium poisoning. Diagnosis may be elusive but alopecia is the clue. *BMJ*. 1993;306(6891):1527-1529.
2. Riyaz R, Pandalai SL, Schwartz M, Kazzi ZN. A Fatal Case of Thallium Toxicity: Challenges in Management. *J Med Toxicol*. 2013;9(1):75-78.
3. TOXNET: Thallium search. U.S. National Library of Medicine. 2008. Available at: <https://toxnet.nlm.nih.gov/cgi-bin/sis/search2/f?.%2Ftemp%2F~A4Lvoq%3A3>.

HEMOGLOBINOPATHIES

1. Ashurst J, Wasson M. Methemoglobinemia: a Systematic Review of the Pathophysiology, Detection, and Treatment. *Del Med J*. 2011;83(7):203-208.
2. Coleman MD, Rhodes LE, Scott AK, Verbov JL, Friedmann PS, Breckenridge AM, Park BK. The use of Cimetidine to Reduce Dapsone-Dependent Methaeoglobinaemia in Dermatitis Herpetiformis Patients. *Br J Clin Pharmacol*. 1992;34(3):244-249.
3. Coleman MD, Scott AK, Breckenridge AM, Park BK. The Use of Cimetidine as a Selective Inhibitor of Dapsone N-hydroxylation in Man. *Br J Clin Pharmacol*. 1990;30(5): 761-767.
4. Feiner JR, Rollins MD, Sall JW, Eilers H, Au P, Bickler PE. Accuracy of Carboxyhemoglobin Detection by Pulse CO-oximetry During Hypoxemia. *Anesth Analg*. 2013;117(4):847-858.

5. Mandi G, Witte S, Meissner P, et al. Safety of the Combination of Chloroquine and Methylene Blue in Healthy Adult Men with G6PD Deficiency from Rural Burkina Faso. *Trop Med Int Health.* 2005;10(1):32-38.
6. Muller O, Mockenhaupt FP, Markis B, et al. Haemolysis Risk in Methylene Blue Treatment of G6:D-sufficient and G6PD-deficiency West-African Children with Uncomplicated Falciparum Malaria: a Synopsis of Four RCTs. *Pharmacoepidemiol Drug Saf.* 2013;22(4):376-385.
7. Prasad R, Singh R, Mishra OP, Pandey M. Dapsone Induced Methemoglobinemia: Intermittent vs continuous intravenous methylene blue therapy. *Indian J Pediatr.* 2006;75(3):245-247.
8. Skoid A, Cosco DL, Klein R. Methemoglobinemia: Pathogenesis, Diagnosis, and Management. *South Med J.* 2011;104(11):757-761.
9. Weaver LK, Hopkins RO, Chan KJ, et al. Hyperbaric Oxygen for Acute Carbon Monoxide Poisoning. *The New England Journal of Medicine.* 2002; 347: 1057-1067.
10. Wenping X, Hui X, Baojun W, et al. Combined Application of Dexamethasone and Hyperbaric Oxygen Therapy Yields Better Efficacy for Patients with Delayed Encephalopathy After Acute Carbon Monoxide Poisoning. *Drug Des Devel Ther.* 2017;11(1):513-519.
11. Xiang W, Xue H, Wang B, Li Y, et al. Efficacy of N-Butylphthalide and Hyperbaric Oxygen Therapy on Cognitive Dysfunction in Patients with Delayed Encephalopathy After Acute Carbon Monoxide Poisoning. *Med Sci Monit.* 2017;23(1):1501-1506.
12. Youngster I, Arcavi L, Schechmaster R, et al. Medications and Glucose-6-Phosphate Dehydrogenase Deficiency: an Evidence-Based Review. *Drug Saf.* 2010; 33(9):713-726.
13. Katz KD, Ruha AM, Curry SC. Aniline and methanol toxicity after shoe dye ingestion. *J Emerg Med.* 2004;27(4):367-369.

MUSHROOMS

1. Berger KJ, Guss DA. Mycotoxins revisited: Part I. *J Emerg Med.* 2005;28(1):53-62.
2. Berger KJ, Guss DA. Mycotoxins revisited: Part II. *J Emerg Med.* 2005;28(2):175-183.
3. Diaz JH. Evolving global epidemiology, syndromic classification, general management, and prevention of unknown mushroom poisonings. *Crit Care Med.* 2005;33(2):419-426.
4. Enjalbert F, Rapior S, Nouguier-Soule J, Guillon S, Amouroux N, Cabot C. Treatment of amatoxin poisoning: 20-year retrospective analysis. *J Toxicol Clin Toxicol.* 2002;40(6):715-757.
5. Graeme KA. Mycetism: A Review of the Recent Literature. *J Med Toxicol.* 2014;10(2):173-189.
6. West PL, Lindgren J, Horowitz BZ. Amanita smithiana mushroom ingestion: a case of delayed renal failure and literature review. *J Med Toxicol.* 2009;5(1):32-38.
7. National Library of Medicine. Toxnet Toxicology Data Network. Accessed July 11, 2018.

PHARMACOLOGIC AGENTS

Acetaminophen

1. Yoon E, Babar A, Choudhary M, Kutner M, Pyrsopoulos N. Acetaminophen-Induced Hepatotoxicity: a Comprehensive Update. *J Clin Transl Hepatol.* 2016;4(2):131-142.
2. Hodgman M, Garrard A. A Review of Acetaminophen Poisoning. *Crit Care Clin.* 2012;28(4):499-516.
3. Jaeschke H, Xie Y, McGill MR. Acetaminophen-induced Liver Injury: from Animal Models to Humans. *J Clin Transl Hepatol.* 2014;2(3):153-161.
4. Rumack BH. Acetaminophen Hepatotoxicity: the first 35 years. *J Toxicol Clin Toxicol.* 2002;40(1):3-20.
5. Heard KJ. Acetylcysteine for Acetaminophen Poisoning. *N Engl J Med.* 2008;359(3):285-292.

6. Ghannoum M, Kazim S, Grunbaum AM, Villeneuve E, Gosselin S. Massive acetaminophen overdose: effect of hemodialysis on acetaminophen and acetylcysteine kinetics. *Clin Toxicol (Phila)*. 2016;54(6):519-522.
7. Sivilotti ML, Juurlink DN, Garland JS, Lenga I, Poley R, Hanly LN, Thompson M. Antidote removal during haemodialysis for massive acetaminophen overdose. *Clin Toxicol (Phila)*. 2013;51(9):855-863.
8. Gosselin S, Juurlink DN, Kielstein JT, et al. Extracorporeal treatment for acetaminophen poisoning: recommendations from the EXTRIP workgroup. *Clin Toxicol (Phila)*. 2014;52(8):856-867.

Anesthetics

Local Anesthetics and Nitrous Oxide

1. Neal JM, Mulroy MF, Weinberg GL, American Society of Regional Anesthesia and Pain Medicine. American Society of Regional Anesthesia and Pain Medicine checklist for managing local anesthetic systemic toxicity: 2012 version. *Reg Anesth Pain Med*. 2012;37(1):16-18.
2. The Association of Anaesthetists of Great Britain and Ireland. Guidelines for the Management of Severe Local Anaesthetic Toxicity. 2010.
3. Leskiw U, Weinberg GL. Lipid resuscitation for local anesthetic toxicity: is it really lifesaving?. *Curr Opin Anaesthesiol*. 2009;22(5):667-671.
4. Layzer RB, Fishman RA, Schafer JA. Neuropathy following abuse of nitrous oxide. *Neurology*. 1978;28(5):504-506.
5. Cadogan M. Local Anaesthetic. Life in the Fast Lane. 2016.

Antidysrhythmics, Type I

1. Low CL, Phelps KR, Bailie GR. Relative efficacy of haemoperfusion, haemodialysis and CAPD in the removal of procainamide and NAPA in a patient with severe procainamide toxicity. *Nephro Dial Transplant*. 1996;11(5):881-884.
2. Phillips RE, Looareesuwan S, White NJ et al. Hypoglycaemia and antimalarial drugs: quinidine and release of insulin. *Br Med J (Clin Res Ed)*. 1986;292(6531):1319-1321.
3. Soni S, Gandhi S. Flecainide overdose causing a Brugada-type pattern on electrocardiogram in a previously well patient. *Am J Emerg Med*. 2009;27(3):375.e1-375.e3.
4. Winecoff AP, Hariman RJ, Grawe JJ, Wang Y, Bauman JL. Reversal of the electrocardiographic effects of cocaine by lidocaine. Part 1. Comparison with sodium bicarbonate and quinidine. *Pharmacotherapy*. 1994;14(6):698-703.
5. Yi H-Y, Lee J-Y, Lee SY, Hong S-Y, Yang Y-M, Park G-N. Cardioprotective effect of glucose-insulin on acute propafenone toxicity in rat. *Am J Emerg Med*. 2012;30(5):680-689.
6. Bayram B, Dedeoglu E, Hocaoglu N, Gazi E. Propafenone induced cardiac arrest: Full recovery with insulin, is it possible? *Am J Emerg Med*. 2013;31(2):457.e5-7.

Antidysrhythmics, Type III

1. Camus P, Martin WJ 2nd, Rosenow EC 3rd. Amiodarone pulmonary toxicity. *Clin Chest Med*. 2004;25(1):65-75.
2. Cardenas GA, Cabral JM, Leslie CA. Amiodarone induced thyrotoxicosis: diagnostic and therapeutic strategies. *Cleve Clin J Med*. 2003;70(7):624-626,628-631.
3. Foley P, Kalra P, Andrews N. Amiodarone - Avoid the danger of Torsade de Pointes. *Resuscitation*. 2008;76(1):137-141.
4. Bayram B, Kose I, Avci S, Arslan A, Acara C. Successful Treatment of Propafenone Intoxication with Intravenous Lipid Emulsion. *Pharmacotherapy*. 2015;35(10):e149-52.

Anticoagulants

DOACs/NOACs

1. Awad NI, Cocchio C. Activated Prothrombin Complex Concentrates for the Reversal of Anticoagulant-Associated Coagulopathy. *PT*. 2013;38(11):696-701.
2. Awad NI, Brunetti L, Juurlink, D. Enhanced Elimination of Dabigatran Through Extracorporeal Methods. *J Med Toxicol*. 2015;11(1):85-95.

3. Cuker A, Siegal D, Crowther M, Garcia D. Laboratory Measurement of the Anticoagulant Activity of the Non-Vitamin K Oral Anticoagulants. *J Am Coll Cardiol.* 2014;64(11):1128-1139.
4. Eerenberg E, Kamphuisen P, Sijpkens M, Meijers J, Buller H, Levi M. Reversal of Rivaroxaban and Dabigatran by Prothrombin Complex Concentrate: A Randomized, Placebo-Controlled, Crossover Study in Healthy Subjects. *Circulation.* 2011;124(14):1573-1579.
5. Product Information: Eliquis, apixaban. 2017.
6. Product Information: Feiba NF®, Anti-Inhibitor Coagulant Complex. 2017.
7. Frontera J, Lewin III J, Rabinstein A, et al. Guideline for Reversal of Antithrombotics in Intracranial Hemorrhage. *Neurocrit Care.* 2016;24(1):6-46.
8. Hawes E, Deal A, Funk-Adcock D, et al. Performance of coagulation tests in patients on therapeutic doses of dabigatran: a cross-sectional pharmacodynamic study based on peak and trough plasma levels. *J Thromb Haemost.* 2013;11(8):1493-1502.
9. Kaatz S, Kouides P, Garcia D, et al. Guidance on the emergent reversal of oral thrombin and factor Xa inhibitors. *Am J Hematol.* 2012;87(S1):S141-S145.
10. Kalus, J. Pharmacologic interventions for reversing the effects of oral anticoagulants. *Am J Health Syst Pharm.* 2013;70(10-Suppl 1):S12-S21.
11. Product Information. Kcentra® (Prothrombin complex concentrate [human]) Prescribing information. 2017.
12. Klein L, Peters J, Miner J, Gorlin J. Evaluation of fixed dose 4-factor prothrombin complex concentrate for emergent warfarin reversal. *Am J Emerg Med.* 2015;33(9):1213-1218.
13. Favaloro EJ, Lippi G. Laboratory Testing in the Era of Direct or Non-Vitamin K Antagonist Oral Anticoagulants: A Practical Guide to Measuring Their Activity and Avoiding Diagnostic Errors. *Semin Thromb Homost.* 2015;41(2):208-227.
14. Marlu R, Hodaj E, Paris A, Albaladejo P, Cracowski J, Pernod G. Effect of non-specific reversal agents on anticoagulant activity of dabigatran and rivaroxaban. *Thromb Haemost.* 2012;108(2):217-224.
15. Mueck W, Stampfuss J, Kubitzka D, Becka M. Clinical Pharmacokinetic and Pharmacodynamic Profile of Rivaroxaban. *Clin Pharmacokinet.* 2014;53(1):1-16.
16. Nitzki-George D, Wozniak I, Caprini J. Current State of Knowledge on Oral Anticoagulant Reversal Using Procoagulant Factors. *Ann Pharmacother.* 2013;47(6):841-855.
17. Pabinger I, Brenner B, Kalina U, Knaub S, Nagy A, Ostermann H. Prothrombin complex concentrate (Beriplex®P/N) for emergency anticoagulation reversal: a prospective multinational clinical trial. *J Thromb Haemost.* 2008;6(4):622-631.
18. Parasrampuria D, Truitt K. Pharmacokinetics and Pharmacodynamics of Edoxaban, a Non-Vitamin K Antagonist Oral Anticoagulant that Inhibits Clotting Factor Xa. *Clin Pharmacokinet.* 2015;55(6):641-655.
19. Pollack CV Jr, Reilly PA, Eikelboom J, et al. Idarucizumab for Dabigatran Reversal. *N Engl J Med.* 2015;373(6):511-520.
20. Pollack CV Jr, Reilly PA, van Ryn J, et al. Idarucizumab for Dabigatran Reversal — Full Cohort Analysis. *N Engl J Med.* 2017;377(5):431-441.
21. Product Information. Pradaxa, Dabigatran. 2017.
22. Raghavan N, Frost CE, Yu Z, et al. Apixaban Metabolism and Pharmacokinetics after Oral Administration to Humans. *Drug Metab Dispos.* 2009;37(1):74-81.
23. Samuelson BT, Cuker A. Measurement and reversal of the direct oral anticoagulants. *Blood Rev.* 2017;31(1):77-84.
24. Van Ryn J, Stangier J, Haertter S, Liesenfeld K, Wienen W, Feuring M, Clemens A. Dabigatran etexilate – a novel, reversible, oral direct thrombin inhibitor: Interpretation of coagulation assays and reversal of anticoagulant activity. *Thromb Haemost.* 2010;103(6):1116-1127.
25. Product Information. XARELTO® (rivaroxaban). 2017.

26. Weingart S. Podcast 203 – New Reversals for New Anticoagulants with Nadia Awad. *EMCrit Blog*. Published on August 10, 2017.
27. Connolly S, Milling T, Eikelboom J, et al. Andexanet Alfa for Acute Major Bleeding Associated with Factor Xa Inhibitors. *N Engl J Med*. 2016;375(12):1131-1141.
28. Van Ryn J, Sieger P, Kink-Eiband M, et al. New Orleans, LA. Adsorption of dabigatran etexilate in water or dabigatran in pooled human plasma by activated charcoal in vitro. Paper presented at 51st American Society of Hematology Annual Meeting and Exposition. 2009.
29. Suryanarayan D, Schulman S. Potential antidotes for reversal of old and new oral anticoagulants. *Thromb Res*. 2014;133(Suppl 2):S158-S166.
30. Ganetsky M, Babu KM, Salhanick SD, Brown RS, Boyer EW. Dabigatran: Review of pharmacology and management of bleeding complications of this novel oral anticoagulant. *J Med Toxicol*. 2011;7(4):281-287.
31. Sarode R, Milling TJ Jr, Refaai MA, Mangione A, Schneider A, Durn BL, Goldstein JN. Efficacy and safety of a 4-factor prothrombin complex concentrate in patients on vitamin K antagonists presenting with major bleeding: a randomized, plasma-controlled, phase IIb study. *Circulation*. 2013;128(11):1234-1243.
32. Goldstein JN, Refaai MA, Milling TJ Jr, Lewis B, Goldberg-Alberts R, Hug BA, Sarode R. Four-factor prothrombin complex concentrate versus plasma for rapid vitamin K antagonist reversal in patients needing urgent surgical or invasive interventions: a phase 3b, open-label, non-inferiority, randomised trial. *Lancet*. 2015;385(9982):2077-2087.
35. Siegal DM, Curnutte JT, Connolly SJ, et al. Andexanet Alfa for the Reversal of Factor Xa Inhibitor Activity. *N Engl J Med*. 2015;373:2413-2424.

Heparin (Unfractionated, LMWH), Antiplatelets

1. Hirsh J, Guyatt G, Albers G, Harrington R, Schunemann HJ. Antithrombotic and Thrombolytic Therapy 8th Ed: ACCP Guidelines. *Chest*. 2008. 133: 71S-105S.
2. Davenport A. Antibodies to Heparin- Platelet Factor 4 Complex: Pathogenesis, Epidemiology, and Management of Heparin-Induced Thrombocytopenia in Hemodialysis. *Am J Kidney Dis*. 2009;54(2):361-374.
3. Brooks DE, Levine M, O'Connor AD, French RNE, Curry SC. Toxicology in the ICU, Part 2: Specific Toxins. *Chest*. 2011;140(4):1072-1085.
4. Protamine. Gold Standard. Clinical Key. Elsevier.
5. Hirsh J, Bauer KA, Donati MB, Gould M, Samama MM, Weitz JI. Parenteral Anticoagulants: ACCP Evidence-Based Clinical Practice Guidelines (8th Ed). *Chest*. 2008;133(6 Suppl):141S-159S.
6. Monte AA, Bodmer M, Schaeffer TH. Low-molecular weight heparin overdose: Management by Observation. *Ann Pharmacother*. 2010;44(11):1836-1839.
7. Nagler M, Haslauer M, Wuillemin WA. Fondaparinux- Data on Efficacy and Safety in Special Situations. *Thromb Res*. 2012;129(4):407-417.
8. Lo GK, Juhl D, Warkentin TE, Sigouin CS, Eichler P, Greinacher A. Evaluation of pretest clinical score (4 T's) for the diagnosis of heparin-induced thrombocytopenia in two clinical settings. *J Thromb Haemost*. 2006;4(4):759-765.
9. Frontera JA, Lewin JJ 3rd, Rabinstein AA, et al. Guideline for reversal of antithrombotics in intracranial hemorrhage. A statement for healthcare professionals from the neurocritical care society and the society of critical care medicine. *Neurocrit Care*. 2016;24(1):6-46.
10. Green D. Fondaparinux is safe for heparin-induced thrombocytopenia. *NEJM J Watch*. 2015.

Warfarin

1. Holbrook A, Schulman S, Witt DM, et al. Evidence-Based Management of Anticoagulant Therapy. *Chest*. 2012;141(2):152-184.
2. Monagle P, Chan AKC, Goldenberg NA, et al. Antithrombotic Therapy in Neonates and Children. *Chest*. 2012;141(2 Suppl): e737S-e801S.

3. Bateman DN, Page CB. Antidotes to coumarins, isoniazid, methotrexate, and thyroxine, toxins that work via metabolic processes. *Br J Clin Pharmacol.* 2016;81(3):437-445.
4. Ageno W, Garcia D, Aguilar MI, et al. Prevention and treatment of bleeding complications in patients receiving vitamin K antagonists, Part 2: Treatment. *Am J Hematol.* 2009;84(9):584-588.
5. Katona B, Wason S. Superwarfarin poisoning. *J Emerg Med.* 1989;7(6):627-631.

Anticonvulsants

1. American College of Medical Toxicology. ACMT Antidote Card. 2015.
2. Kennedy KA, Ryan M. Neurotoxic Effects of Pharmaceutical Agents III: Neurological Agents. In: Dobbs M, ed. *Clinical Neurotoxicology: Syndromes, Substances, Environments.* 1st ed. Philadelphia, PA: Saunders, an imprint of Elsevier Inc; 2009.
3. Wade JF, Dang CV, Nelson L, Wasserberger J. Emergent Complications of the Newer Anticonvulsants. *J Emerg Med.* 2010;38(2):231-237.
4. Wills B, Reynolds P, Chu E, Murphy C, Cumpston K, Stromberg P, Rose R. Clinical outcomes in newer anticonvulsant overdose: a poison center observational study. *J Med Toxicol.* 2014;10(3):254-60.
5. Agulnik A, Kelly DP, Brucolieri R, Yuskaitis C, Ebrahimi-Fakhari D, Sahin M, Burns MM, Kohane DS. Combination Clearance Therapy and Barbiturate Coma for Severe Carbamazepine Overdose. *Pediatrics.* 2017;139(5): pii: e20161560.
6. Fernandez A, Dor E, Menard ML, Askenazy F, Thümler S. Carbamazepine and psychotropic treatment interaction: Two case studies of carbamazepine overdosage. *Arch Pediatr.* 2015;22(5):536-539.
7. Jha A, Abhilash KP, Bandhyopadhyay R, Victor PJ. Hypoglycemia - a rare complication of carbamazepine overdose. *Indian J Pharmacol.* 2014;46(6):651-652.
8. Spiller HA, Strauch J, Essing-Spiller SJ, Burns G. Thirteen years of oxcarbazepine exposures reported to US poison centers: 2000 to 2012. *Hum Exp Toxicol.* 2016;35(10):1055-1059.
9. Keränen T, Sorri A, Moilanen E, Ylitalo P. Effects of charcoal on the absorption and elimination of the antiepileptic drugs lamotrigine and oxcarbazepine. *Arzneimittelforschung.* 2010;60(7):421-6.
10. Moinho R, Dias A, Estanqueiro P, Farela Neves J. Overdose with antiepileptic drugs: the efficacy of extracorporeal removal techniques. *BMJ Case Rep.* 2014;2014. pii: bcr2014207761.
11. Malissin I, Baud FJ, Deveaux M, Champion S, Deye N, Megarbane B. Fatal lacosamide poisoning in relation to cardiac conduction impairment and cardiovascular failure. *Clin Toxicol (Phila).* 2013;51(4):381-382.
12. Chua-Tuan JL, Cao D, Iwanicki JL, Hoyte CO. Cardiac sodium channel blockade after an intentional ingestion of lacosamide, cyclobenzaprine, and levetiracetam: Case report. *Clin Toxicol (Phila).* 2015;53(6):565-568.
13. Mahmoud SH. Antiepileptic Drug Removal by Continuous Renal Replacement Therapy: A Review of the Literature. *Clin Drug Investig.* 2017;37(1):7-23.
14. Kartal A. Can High-Dose Levetiracetam Be Safe? A Case Report of Prolonged Accidental High-Dose Levetiracetam Administration and Review of the Literature. *Clin Neuropharmacol.* 2017; 40(5):217-218.
15. Özkale Y, Özkale M, Saygi S, Erol I. Long-term accidental overdose of levetiracetam in an infant. *J Child Neurol.* 2014;29(7):959-61.
16. Larkin TM, Cohen-Oram AN, Catalano G, Catalano MC. Overdose with levetiracetam: a case report and review of the literature. *J Clin Pharm Ther.* 2013;38(1):68-70.
17. Chayasirisobhon S, Chayasirisobhon WV, Tsay CC. Acute levetiracetam overdose presented with mild adverse events. *Acta Neurol Taiwan.* 2010;19(4):292-295.
18. Mahmoud SH. Antiepileptic Drug Removal by Continuous Renal Replacement Therapy: A Review of the Literature. *Clin Drug Investig.* 2017;37(1):7-23.

19. Page CB, Mostafa A, Saiao A, Grice JE, Roberts MS, Isbister GK. Cardiovascular toxicity with levetiracetam overdose. *Clin Toxicol (Phila)*. 2016;54(2):152-4.
20. Wade JF, Dang CV, Nelson L, Wasserberger J. Emergent complications of the newer anticonvulsants. *J Emerg Med*. 2010;38(2):231-237.
21. Wills B, Reynolds P, Chu E, Murphy C, Cumpston K, Stromberg P, Rose R. Clinical outcomes in newer anticonvulsant overdose: a poison center observational study. *J Med Toxicol*. 2014;10(3):254-60.

Antidepressants

1. Isbister, GK, Bowe SJ, Dawson A, Whyte IM. Relative Toxicity of Selective Serotonin Reuptake Inhibitors (SSRIs) in Overdose. *J Toxicol Clin Toxicol*. 2004;42(3):277-285.
2. Linden CH, Rumack BH. Monoamine Oxidase Inhibitor Overdose. *Ann Emerg Med*. 1984;13(12):1137-1144.
3. Woolf AD, Erdman AR, Nelson LS, et al. Tricyclic antidepressant poisoning: an evidence-based consensus guideline for out-of-hospital management. *Clin Toxicol (Phil)*. 2007;45(3):203-233.

Antidepressants-Lithium

1. Offerman S, Alsop J, Lee J, Holmes J. Hospitalized lithium overdose cases reported to the California Poison Control System. *Clin Toxicol (Phil)*. 2010;48(5):443-448.
2. Roberts DM, Gosselin S. Variability in the management of lithium poisoning. *Semin Dial*. 2014;27(4):390-394.
3. Decker BS, Goldfarb DS, Dargan PI, et al. Extracorporeal Treatment for Lithium Poisoning: Systematic Review and Recommendations from the EXTRIP Workgroup. *Clin J Am Soc Nephrol*. 2015;10(5):875-887.
4. Vodovar D, El Balkhi S, Curis E, Deye N, Mégarbane B. Lithium poisoning in the intensive care unit: predictive factors of severity and indications for extracorporeal toxin removal to improve outcome. *Clin Toxicol (Phila)*. 2016;54(8):615-623.
5. Thanacoody R, Caravati E, Troutman B, et al. Position paper update: whole bowel irrigation for gastrointestinal decontamination of overdose patients. *Clin Toxicol (Phila)*. 2015;53(1):5-12.
6. Bretaudeau Deguigne M, Hamel J, Boels D, Harry P. Lithium poisoning: the value of early digestive tract decontamination. *Clin Toxicol (Phila)*. 2013;51(4):243-248.
7. Darbar D, Yang T, Churchwell K, Wilde AAM, Roden DM. Unmasking of Brugada Syndrome by Lithium. *Circulation*. 2005;112(11):1527-1531.
8. Wills BK, Mycyk MB, Mazor S, Zell-Kanter M, Brace L, Erickson T. Factitious lithium toxicity secondary to lithium heparin-containing blood tubes. *J Med Toxicol*. 2006;2(2):61-3.
9. Lithium. Extracorporeal Treatments in Poisoning Workgroup. Available at <http://www.extrip-workgroup.org/lithium>. Accessed March 20, 2018.

Antidiabetics and Hypoglycemics

1. Fasano CJ, O'Malley G, Dominici P, Aguilera E, Latta DR. Comparison of octreotide and standard therapy versus standard therapy alone for the treatment of sulfonylurea-induced hypoglycemia. *Ann Emerg Med*. 2008;51(4):400-406.
2. Burke KR, Schumacher CA, Harpe SE. SGLT2 Inhibitors: A Systematic Review of Diabetic Ketoacidosis and Related Risk Factors in the Primary Literature. *Pharmacotherapy*. 2017;37(2):187-194.
3. Eppenga WL, Lalmohamed A, Geerts AF, et al. Risk of lactic acidosis or elevated lactate concentrations in metformin users with renal impairment: a population-based cohort study. *Diabetes Care*. 2014;37(8):2218-2224.
4. Krishnan L, Dhatriya K, Gerontitis D. No clinical harm from a massive exenatide overdose: a short report. *Clin Toxicol (Phila)*. 2013;51(1):61.

Anticholinergics and Antihistamines

1. Abdi A, Rose E, Levine M. Diphenhydramine Overdose with Intraventricular Conduction Delay Treated with Hypertonic Sodium Bicarbonate and IV Lipid Emulsion. *West J Emerg Med*. 2014;15(7):855-888.

2. Benson BE, Farooqi MF, Klein-Schwartz W, et al. Diphenhydramine dose-response: a novel approach to determine triage thresholds. *Clin Toxicol (Phila)*. 2010;48(8):820-831.
3. Corallo CE, Whitfield A, Wu A. Anticholinergic syndrome following an unintentional overdose of scopolamine. *Ther Clin Risk Manag*. 2009;5(5):719-723.
4. Dawson AH, Buckley NA. Pharmacological management of anticholinergic delirium - theory, evidence and practice. *Br J Clin Pharmacol*. 2016;81(3):516-524.
5. Glauser T, Shlomo S, Gloss D, et al. Evidence-Based Guideline: Treatment of Convulsive Status Epilepticus in Children and Adults: Report of the Guideline Committee of the American Epilepsy Society. *Epilepsy Curr*. 2016;16(1):48-61.
6. Jang DH, Manini AF, Trueger NS, et al. Status epilepticus and wide-complex tachycardia secondary to diphenhydramine overdose. *Clin Toxicol (Phila)*. 2010;48(9):945-948.
7. Palmer SE, McLean RM, Ellis PM, Harrison-Woolrych M. Life-Threatening Clozapine-Induced Gastrointestinal Hypomotility: An Analysis of 102 Cases. *J Clin Psychiatry*. 2008;69(5):759-768.
8. Ramnarine M. Anticholinergic Toxicity. *Medscape*. 2017.
9. Scharman E, Erdman A, Troutman W, et al. Diphenhydramine and dimenhydrinate poisoning: an evidence-based consensus guideline for out-of-hospital management. *Clin Toxicol (Phila)*. 2006;44(3):205-223.
10. Hydroxyzine/olanzapine overdose. *Reactions Weekly*. 2015;1556(1):148.
11. Verheijden NA, Koch BC, Brkic Z, Alisma J, Klein Nagelvoort-Schuit SC. A 45-year-old woman with an anticholinergic toxicodrome. *Neth J Med*. 2016;74(3):133-135.
12. Diphenhydramine abuse/overdose. *Reactions Weekly*. 2015;1553(1):179.
13. Walker A, Delle Donne A, Douglas E, Spicer K, Pluim T. Novel use of dexmedetomidine for the treatment of anticholinergic toxicodrome. *J Med Toxicol*. 2014;10(4):406-410.
14. Dawson AH, Buckley NA. Pharmacological management of anticholinergic delirium - theory, evidence and practice. *Br J Clin Pharmacol*. 2016;81(3):516-524.
15. Zhang XC, Farrell N, Haronian T, Hack J. Postoperative anticholinergic poisoning: Concealed complications of a commonly used medication. *J Emerg Med*. 2017;pii: S0736-4679(17)30432-8.
16. Watkins JW, Schwarz ES, Arroyo-Plasencia AM, Mullins ME, Toxicology Investigators Consortium investigators. The use of physostigmine by toxicologists in anticholinergic toxicity. *J Med Toxicol*. 2015;11(2):179-184.
17. American College of Medical Toxicology. ACMT Antidote Card 2015. http://www.acmt.net/_Library/Membership_Documents/ACMT_Antidote_Card_May_2015.pdf. Accessed August 08, 2017.
18. Gee SW, Lin A, Tobias JD. Dexmedetomidine infusion to control agitation due to anticholinergic toxicodromes in adolescents, a case series. *J Pediatr Pharmacol Ther*. 2015;20(4):329-334.
19. Cowan K, Landman RA, Saini A. Dexmedetomidine as an adjunct to treat anticholinergic toxicodrome in children. *Glob Pediatr Health*. 2017;4:2333794X17704764.
20. Scharman EJ, Erdman AR, Wax PM, et al. Diphenhydramine and dimenhydrinate poisoning: an evidence-based consensus guideline for out-of-hospital management. *Clin Toxicol (Phila)*. 2006;44(3):205-223.
21. Rumack BH. Anticholinergic poisoning: treatment with physostigmine. *Pediatrics*. 1973;52(3):449-451.
22. Granacher RP, Baldessarini RJ. Physostigmine: Its use in acute anticholinergic syndrome with antidepressant and antiparkinson drugs. *Arch Gen Psychiatry*. 1975;32(3):375-380.
23. Nelson BS, Heischober B. Betel nut: a common drug used by naturalized citizens from India, Far East Asia, and the South Pacific Islands. *Ann Emerg Med*. 1999;34(2):238-243.
24. Weiner AL, Bayer MJ, McKay CA Jr, DeMeo M, Starr E. Anticholinergic poisoning with adulterated intranasal cocaine. *Am J Emerg Med*. 1998;16(5):517-520.

Antihypertensives

1. Lucas C, Christie GA, Waring WS. Rapid onset of haemodynamic effects after angiotensin converting enzyme-inhibitor overdose: implications for initial patient triage. *Emerg Med J.* 2006;23(11):854-7.
2. Christie GA, Lucas C, Bateman DN, Waring WS. Redefining the ACE-inhibitor dose-response relationship: substantial blood pressure lowering after massive doses. *Eur J Clin Pharmacol.* 2006 Dec;62(12):989-93.
3. Hetterich N, Lauterbach E, Stürer A, Weilemann LS, Lauterbach M. Toxicity of antihypertensives in unintentional poisoning of young children. *J Emerg Med.* 2014;47(2):155-62.
4. Lewis JC, Alsop JA. A 13-year review of lisinopril ingestions in children less than 6 years of age. *Clin Toxicol (Phila).* 2013;51(9):864-870.
5. Forrester MB. Adult lisinopril ingestions reported to Texas poison control centers, 1998-2005. *Hum Exp Toxicol.* 2007;26(6):483-489.
6. Baş M, Greve J, Stelter K, et al. A randomized trial of icatibant in ACE-inhibitor-induced angioedema. *N Engl J Med.* 2015;372(5):418-25.
7. Sinert R, Levy P, Bernstein JA, et al. Randomized trial of Icatibant for angiotensin-converting enzyme inhibitor-induced upper airway angioedema. *J Allergy Clin Immunol Pract.* 2017;5(5):1402.
8. Klein-Schwartz W. Trends and toxic effects from pediatric clonidine exposures. *Arch Pediatr Adolesc Med.* 2002;156(4):392-396.
9. Spiller HA, Klein-Schwartz W, Colvin JM, Villalobos D, Johnson PB, Anderson DL. Toxic clonidine ingestion in children. *J Pediatr.* 2005;146(2):263-266.
10. Isbister GK, Heppell SP, Page CB, Ryan NM. Adult clonidine overdose: prolonged bradycardia and central nervous system depression, but not severe toxicity. *Clin Toxicol (Phila).* 2017;55(3):187-192.
11. Wang GS, Le Lait MC, Heard K. Unintentional pediatric exposures to central alpha-2 agonists reported to the National Poison Data System. *J Pediatr.* 2014;164(1):149-152.
12. Seger DL. Clonidine Toxicity Revisited. *J Toxicol Clin Toxicol.* 2002;40(2):145-155.
13. Seger DL, Loden JK. Naloxone reversal of clonidine toxicity: dose, dose, dose. *Clin Toxicol (Phila).* 2018;16:1-7.
14. Lip GY, Ferner RE. Poisoning with anti-hypertensive drugs: alpha-adrenoceptor antagonists. *J Hum Hypertens.* 1995;9(7):523-526.
15. Farrell SE, Epstein SK. Overdose of Rogaine Extra Strength for Men topical minoxidil preparation. *J Toxicol Clin Toxicol.* 1999;37(6):781-783.
16. Claudet I, Cortey C, Honorat R, Franchitto N. Minoxidil topical solution: an unsafe product for children. *Pediatr Emerg Care.* 2015;31(1):44-46.
17. Sipe EK, Trienski TL, Porter JM. Cyanide toxicity in the surgical intensive care unit: a case report. *Am Surg.* 2001;67(7):684-686.
18. Hwang KS, Kim GH. Thiazide-induced hyponatremia. *Electrolyte Blood Press.* 2010;8(1):51-57.

Beta Blocker

1. Love JN, Litovitz TL, Howell JM, Clancy C. Characterization of fatal beta blocker ingestion: a review of the American Association of Poison Control Centers data from 1985 to 1995. *J Toxicol Clin Toxicol.* 1997;35(4):353-359.
2. DeWitt CR, Waksman JC. Pharmacology, pathophysiology and management of calcium channel blocker and beta-blocker toxicity. *Toxicol Rev.* 2004;23(4):223-238.
3. Wax PM, Erdman AR, Chyka PA, et al. Beta-blocker ingestion: an evidence-based consensus guideline for out-of-hospital management. *Clin Toxicol (Phila).* 2005;43(3):131-146.
4. Graudins A, Lee HM, Druda D. Calcium channel antagonist and beta-blocker overdose: antidotes and adjunct therapies. *Br J Clin Pharmacol.* 2016;81(3):453-461.

5. Shepherd G. Treatment of poisoning caused by beta-adrenergic and calcium-channel blockers. *Am J Health Syst Pharm.* 2006;63(19):1828-35. Review. Erratum in: *Am J Health Syst Pharm.* 2008;65(17):1592.
6. Engebretsen KM, Kaczmarek KM, Morgan J, Holger JS. High-dose insulin therapy in beta-blocker and calcium channel-blocker poisoning. *Clin Toxicol (Phila).* 2011;49(4):277-283.
7. Escajeda JT, Katz KD, Rittenberger JC. Successful treatment of metoprolol-induced cardiac arrest with high-dose insulin, lipid emulsion, and ECMO. *Am J Emerg Med.* 2015;33(8):1111.e1-4.
8. Mégarbane B, Deye N, Malissin I, Baud FJ. Usefulness of the serum lactate concentration for predicting mortality in acute beta-blocker poisoning. *Clin Toxicol (Phila).* 2010;48(10):974-978.

Calcium Channel Blocker

1. St-Onge M, Anseeuw K, Cantrell FL, et al. Experts Consensus Recommendations for the Management of Calcium Channel Blocker Poisoning in Adults. *Crit Care Med.* 2017;45(3):e306-e315.
2. St-Onge M, Dube PA, Gosselin S, et al. Treatment for calcium channel blocker poisoning: a systematic review. *Clin Toxicol (Phila).* 2014;52(9):926-944.
3. DeWitt CR, Waksman JC. Pharmacology, pathophysiology and management of calcium channel blocker and beta-blocker toxicity. *Toxicol Rev.* 2004;23(4):223-238.
4. Graudins A, Lee HM, Druda D. Calcium channel antagonist and beta-blocker overdose: antidotes and adjunct therapies. *Br J Clin Pharmacol.* 2016;81(3):453-461.
5. Gosselin S, Hoegberg LC, Hoffman RS, et al. Evidence-based recommendations on the use of intravenous lipid emulsion therapy in poisoning. *Clin Toxicol (Phila).* 2016;54(10):899-923.
6. Rietjens SJ, de Lange DW, Donker DW, Meulenbelt J. Practical recommendations for calcium channel antagonist poisoning. *Neth J Med.* 2016;74(2):60-67.
7. Jang DH, Donovan S, Nelson LS, Bania TC, Hoffman RS, Chu J. Efficacy of methylene blue in an experimental model of calcium channel blocker-induced shock. *Ann Emerg Med.* 2015;65(4):410-415.
8. Levine M, Curry SC, Padilla-Jones A, Ruha AM. Critical care management of verapamil and diltiazem overdose with a focus on vasopressors: a 25-year experience at a single center. *Ann Emerg Med.* 2013;62(3):252-258.

Antipsychotics

Atypical Antipsychotics

1. Levin M, Ruha A. Overdose of atypical antipsychotics: clinical presentation, mechanisms of toxicity, and management. *CNS Drugs.* 2012;26(7):601-611.
2. Minns AB, Clark RF. Toxicology and overdose of atypical antipsychotics. *J Emerg Med.* 2012;43(5):906-913.
3. Berling I, Buckley NA, Isbister GK. The antipsychotic story: changes in prescriptions and overdose without better safety. *Br J Clin Pharmacol.* 2016;82:249-254.
4. Tan HH, Hoppe J, Heard K. A systematic review of cardiovascular effects after atypical antipsychotic medication overdose. *Am J Emerg Med.* 2009;27:607-616.
5. Burns M. The pharmacology and toxicology of atypical antipsychotic agents. *Clin Toxicol.* 2001;39(1):1-14.

Typical Antipsychotics

1. Abi-Dargham A, Rodenhiser J, Printz D, et al. Increased baseline occupancy of D2 receptors by dopamine in schizophrenia. *Proc Natl Acad Sci USA.* 2000;97(14):8104-8109.
2. Bhanushali MJ, Tuite PJ. The evaluation and management of patients with neuroleptic malignant syndrome. *Neurol Clin.* 2004;22(2):389-411.
3. Buckley N, McManus P. Fatal toxicity of drugs used in the treatment of psychotic illnesses. *Br J Psychiatry.* 1998;172(6):461-464.
4. Caroff SN, Mann SC: Neuroleptic Malignant Syndrome. *Med Clin North Am.* 1993;77(1):185-202.

5. De Hert M, Detraux J, van Winkel R, Yu W, Correll CU. Metabolic and Cardiovascular Adverse Effects Associated with Antipsychotic Drugs. *Nat Rev Endocrinol*. 2011;8(2):114-126.
6. Gurrera RJ, Caroff SN, Cohen A, et al. An International Consensus Study of Neuroleptic Malignant Syndrome Diagnostic Criteria using the Delphi Method. *J Clin Psychiatry*. 2011;72(9):1222-1228.
7. Jeste DV, Caligiuri MP, Paulsen JS, et al. Risk of tardive dyskinesia in older patients. A prospective longitudinal study of 266 outpatients. *Arch Gen Psychiatry*. 1995;52(9):756-765.
8. Kapur S, Mamo D. Half a century of antipsychotics and still a central role for dopamine D2 receptors. *Prog Neuropsychopharmacol Biol Psychiatry*. 2003;27(7):1081-1090.
9. Rathbone J, Soares-Weiser K. Anticholinergics for neuroleptic induced acute akathisia. *Cochrane Database Syst Rev*. 2006;18(4):CD003727.
10. Tarsy D, Baldessarini RJ, Tarazi FI. Effects of newer antipsychotics on extrapyramidal function. *CNS Drugs*. 2002;16(1):23-45.
11. Seeman P, Kapur S. Schizophrenia: more dopamine, more D2 receptors. *Proc Natl Acad Sci USA*. 2000;97(14):7673-7675.

Digoxin

1. Bauman JL, Didomenico RJ, Galanter WL. Mechanisms, manifestations, and management of digoxin toxicity in the modern era. *Am J Cardiovasc Drugs*. 2006;6(2):77-86.
2. See I, Shehab N, Kegler SR, Laskar SR, Budnitz DS. Emergency Department Visits and Hospitalizations for Digoxin Toxicity: United States, 2005 to 2010. *Circ Heart Fail*. 2014;7(1):28-34.
3. Papageorgiou P, Lang E, Fedorowicz Z, Oettgen P. Digoxin (and Other Cardiac Glycoside) Overdose. *EBSCO Health*. 2016.
4. Chan BS, Buckley NA. Digoxin-specific antibody fragments in the treatment of digoxin toxicity. *Clin Toxicol (Phila)*. 2014;52(8):824-836.
5. Ma G, Brady WJ, Pollack M, Chan TC. Electrocardiographic manifestations: Digitalis toxicity. *J Emerg Med*. 2001;20(2):145-152.
6. Ferri F. "Digoxin Toxicity." Ferri's Clinical Advisor 2018 E-Book: 5 Books in 1. Philadelphia, PA: Elsevier; 2018.
7. Lalonde RL, Deshpande R, Hamilton PP, McLean WM, Greenway DC. Acceleration of digoxin clearance by activated charcoal. *Clin Pharmacol Ther*. 1985;37(4):367-371.
8. Bateman DN. Digoxin-specific antibody fragments: how much and when? *Toxicol Rev*. 2004; 23(3):135-43.

Methotrexate

1. LoVecchio F, Katz KD, Watts DJ, Wood IO. Four-year experience with methotrexate exposures. *J Med Toxicol*. 2008;4(3):149-150.
2. Ettinger LJ, Freeman AI, Creaven PJ. Intrathecal Methotrexate Overdose without Neurotoxicity: Case Report and Literature Review. *Cancer*. 1978;41(4):1270-1273.
3. Widemann BC, Balis FM Shalabi A, et al. Treatment of Accidental Intrathecal Methotrexate Overdose With Intrathecal Carboxypeptidase G2. *J Natl Cancer Inst*. 2004;96(20):1557-1559.

Methylxanthines

1. Bryczkowski C, Geib AJ. Combined Butalbital/Acetaminophen/Caffeine Overdose: Case Files of the Robert Wood Johnson Medical School Toxicology Service. *J Med Toxicol*. 2012;8:424-431.

Opioids

1. Boyer EW. Management of opioid analgesic overdose. *N Engl J Med*. 2012;367(2):146-155.

2. Centers for Disease Control and Prevention (CDC). Vital signs: Overdoses of prescription opioid pain relievers—United States, 1999–2008. *MMWR Morb Mortal Wkly Rep.* 2011;60(43):1487-1492.
3. Milone MC. Laboratory testing for prescription opioids. *J Med Toxicol.* 2012;8(4):408-416.
4. Traub SJ, Hoffman RS, Nelson LS. Body packing - the internal concealment of illicit drugs. *N Engl J Med.* 2003;349:2519-2526.
5. Shahnazi M, Hassanian-Moghaddam H, Gachkar L, et al. Comparison of abdominal computed tomography with and without oral contrast in diagnosis of body packers and body stuffers. *Clin Toxicol (Phila).* 2015;53(7):596-603.
6. Mrvos R, Feuchter AC, Katz KD, Duback-Morris LF, Brooks DE, Krenzelok EP. Whole fentanyl patch ingestion: a multi-center case series. *J Emerg Med.* 2012;42(5):549-552.
7. Yamamoto T, Malavasi E, Archer JR, Daragan PI, Wood DM. Management of body stuffers presenting to the emergency department. *Eur J Emerg Med.* 2016;23(6):425-429.
8. Moreira M, Buchanan J, Heard K. Validation of a 6-hour observation period for cocaine body stuffers. *Am J Emerg Med.* 2011;29(3):299-303.
9. Lin M for ALiEM. Trick of the Trade: Oral naloxone for opioid-induced constipation. <https://www.aliem.com/2012/08/trick-of-trade-oral-naloxone-for-opioid/>. Accessed May 1, 2018.
10. Stolbach A for The Tox and The Hound (EMCrit). Naloxone-resistant opioids. <https://emcrit.org/toxhound/is-this-anything/>. Accessed May 1, 2018.

Loperamide

1. Eggleston W, Marraffa JM, Stork CM, et al. Notes from the Field: Cardiac Dysrhythmias After Loperamide Abuse – New York, 2008-2016. *MMWR Morb Mortal Wkly Rep.* 2016;65(45):1276-1277.
2. Katz KD, Cannon RD, Cook MD, et al. Loperamide-Induced Torsades de Pointes: A Case Series. *J Emerg Med.* 2017;53(3):339-344.
3. Miller H, Panahi L, Tapia D, Tran A, Bowman JD. Loperamide misuse and abuse. *J Am Pharm Assoc.* 2017;57(2S):S45-S50.
4. Riaz IB, Khan MS, Kamal MU, et al. Cardiac Dysrhythmias Associated with Substitutive Use of Loperamide: A Systematic Review. *Am J Ther.* 2017;[Epub ahead of print].
5. Vieweg WVR, Lipps WF, Fernandez A. Opioids and Methadone Equivalents for Clinicians. *Prim Care Companion J Clin Psychiatry.* 2005;7(3):86-88.
6. Wu PE, Juurlink DN. Clinical Review. Loperamide Toxicity. *Ann Emerg Med.* 2017;70(2):245-252.

Tramadol

1. Dean L. Tramadol Therapy and CYP2D6 Genotype. In: Pratt V, McLeod H, Rubinstein W, et al, eds. Medical Genetics Summary. Bethesda, MD: National Center for Biotechnology Information (US). 2012.
2. Rastogi R, Swarm RA, Patel TA. Case scenario: opioid associated with serotonin syndrome: implications to the practitioners. *Anesthesiology.* 2011;115(6):1291-1298.
3. Stassinos GL, Gonzales L, Klein-Schwartz W. Characterizing the Toxicity and Dose-Effect Profile of Tramadol Ingestions in Children. *Pediatr Emerg Care.* 2017 Feb 21. [epub ahead of print]
4. Gong L, Stamer UM, Tzvetkov MV, Altman RB, Klein TE. PharmGKB summary: tramadol pathway. *Pharmacogenet Geneomics.* 2014;24(7):374-380.
5. Marquardt KA, Alsop JA, Albertson TE. Tramadol exposures reported to statewide poison control system. *Ann Pharmacother.* 2005;29(6):1039-1044.
6. Sansone RA, Sansone LA. Seizures, serotonin syndrome, and coadministered antidepressants. *Psychiatry (Edgmont).* 2009;6(4):17-21.

Salicylates

1. Juurlink DN, Gosselin S, Kielstein JT, et al. Extracorporeal Treatment for Salicylate Poisoning: Systemic Review and Recommendations From the EXTRIP Workgroup. *Ann Emerg Med.* 2015;66(2):165-181.
2. Shively RM, Hoffman RS, Manini AF. Acute Salicylate Poisoning: Risk Factors for Severe Outcome. *Clin Toxicol (Phila).* 2017;55(3):175-180.
3. Wong A, Mac K, Aneman A, Wong J, Chan BS. Modern Intermittent Haemodialysis (IHD) is an Effective Method of Removing Salicylate in Chronic Topical Salicylate Toxicity. *J Med Toxicol.* 2016;12(1):130-133.
4. American College of Medical Toxicology. Guidance Document: Management Priorities in Salicylate Toxicity. *J Med Toxicol.* 2015;11(1):149-152.

Sedatives/hypnotics

Baclofen

1. Dias LS, Vivek G, Manthappa M, Acharya RV. Role of hemodialysis in baclofen overdose with normal renal function. *Indian J Pharmacol.* 2011;43(6):722-723.
2. Hsieh MJ, Chen SC, Weng TI, Fang CC, Tsai TJ. Treating baclofen overdose by hemodialysis. *Am J Emerg Med.* 2012;30(8):1654.e5-7.
3. Porter LM, Merrick SS, Katz KD. Baclofen toxicity in a patient with hemodialysis-dependent end-stage renal disease. *J Emerg Med.* 2017;52(4):e99-e100.
4. Niehaus MT, Elliott NC, Katz KD. Baclofen toxicity causing acute, reversible dyskinesia. *J Med Toxicol.* 2016;12(4):406-407.

Barbiturates

1. Gonzalez LA, Gatch MB, Forster MJ, Dillon GH. Abuse Potential of Soma: the GABA(A) Receptor as a Target. *Mol Cell Pharmacol.* 2009;1(4):180-186.
2. Reeves RR, Burke RS. Carisoprodol: abuse potential and withdrawal syndrome. *Curr Drug Abuse Rev.* 2010;3(1):33-38.

Gamma-hydroxybutyrate

1. Teter CJ, Guthrie SK. A comprehensive review of MDMA and GHB: two common club drugs. *Pharmacotherapy.* 2001;21(12):1486-1513.
2. Mason PE, Kerns WP 2nd. Gamma Hydroxybutyric Acid (GHB) Intoxication. *Acad Emerg Med.* 2002;9(7):730-739.

Z Drugs

1. Gunja N. The clinical and forensic toxicology of Z-drugs. *J Med Toxicol.* 2013;9(2):155-162.

Sedatives/Hypnotics

1. Gonzalez LA, Gatch MB, Forster MJ, Dillon GH. Abuse Potential of Soma: the GABA(A) Receptor as a Target. *Mol Cell Pharmacol.* 2009;1(4):180-186.
2. Reeves RR, Burke RS. Carisoprodol: abuse potential and withdrawal syndrome. *Curr Drug Abuse Rev.* 2010;3(1):33-38.

PESTICIDES/RODENTICIDES

Aluminum Phosphide

1. Farahani MV, Soroosh D, Marashi SM. Thoughts on the current management of acute aluminum phosphide toxicity and proposals for therapy: An evidence-based review. *Indian J Crit Care Med.* 2016;20(12):724-730.
2. Gurjar M, Baronia AK, Azim A, Sharma K. Managing aluminum phosphide poisonings. *J Emerg Trauma Shock.* 2011;4(3):378-384.
3. Mohan B, Singh B, Gupta V, et al. Outcome of patients supported by extracorporeal membrane oxygenation for aluminum phosphide poisoning: An observational study. *Indian Heart J.* 2016;68(3):295-301.
4. Shadnia S, Rahimi M, Pajoumand A, Rasouli MH, Abdollahi M. Successful treatment of acute aluminum phosphide poisoning: Possible benefit of coconut oil. *Hum Exp Toxicol.* 2005;24(4):215-218.

5. Tehrani H, Halvaei Z, Shadnia S, Soltaninejad K, Abdollahi M. Protective effects of N-acetylcysteine on aluminum phosphide-induced oxidative stress in acute human poisoning. *Clin Toxicol (Phila)*. 2013;51(1):23-28.

Barium

1. Bhoelan BS, Stevering CH, van der Boog AT, van der Heyden MA. Barium toxicity and the role of the potassium inward rectifier current. *Clin Toxicol (Phila)*. 2014;52(6):584-593.

Sodium Monofluoroacetate and Fluoroacetamide

1. Proudfoot AT, Bradberry SM, Vale JA. Sodium fluoroacetate poisoning. *Toxicol Rev*. 2006;25(4): 213-219.

2. Goncharov NV, Jenkins RO, Radilov AS. Toxicology of fluoroacetate: a review, with possible directions for therapy research. *J Appl Toxicol*. 2006;26(2):148-161.

Strychnine

1. Wood DM, Webster E, Martinez D, Dargan PI, Jones AL. Case report: Survival after deliberate strychnine self-poisoning, with toxicokinetic data. *Crit Care*. 2002;6(5):456-459.
2. Palatnick W, Meatherall R, Sitar D, Tenenbein M. Toxicokinetics of acute strychnine poisoning. *J Toxicol Clin Toxicol*. 1997;35(6):617-620.
3. Boyd RE, Brennan PT, Deng JF, Rochester DF, Spyker DA. Strychnine poisoning: recovery from profound lactic acidosis, hyperthermia, and rhabdomyolysis. *Am J Med*. 1983;74(3):507-512.

Superwarfarins

1. Cannon R, Ruha AM. Insecticides, Herbicides, and Rodenticides. In: Adams JG, Barton ED, Collings J, Gisondi MA, Nadel ES, eds. *Emergency Medicine Clinical Essentials*. Philadelphia, PA:Elsevier Saunders; 2013.
2. Caravati E, Erdman A, et al. Long-acting anticoagulant rodenticide poisoning: an evidence-based consensus guideline for out-of-hospital management. *Clin Toxicol (Phila)*. 2007;45(1):1-22.
3. Haesloop O, Tillick A, Nichol G, Strote J. Superwarfarin ingestion treated successfully with prothrombin complex concentrate. *Am J Emerg Med*. 2015;34(1):116.e1-116.e2.
4. Feinstein DL, Akpa BS, Ayee MA, et al. The emerging threat of superwarfarins: history, detection, mechanisms, and countermeasures. *Ann NY Acad Sci*. 2016;1374(1):111-122.
5. Bruno GR, Howland MA, McMeeking A, Hoffman RS. Long-acting anticoagulant overdose: brodifacoum kinetics and optimal vitamin K dosing. *Ann Emerg Med*. 2000;36(3):262-267.
6. King, N, Tran MH. Long-Acting Anticoagulant Rodenticide (Superwarfarin) Poisoning: A Review of Its Historical Development, Epidemiology, and Clinical Management. *Transfus Med Rev*. 2015;29(4):250-258.

Cholinergic Toxicity

1. Katz KD. Organophosphate Toxicity. *Medscape*. 2017;May.
2. Namba T, Nolte CT, Jackrel J, Grob D. Poisoning due to organophosphate insecticides: Acute and chronic manifestations. *Am J Med*. 1979;50(4), 475-492.
3. Mayer B. How much nicotine kills a human? Tracing back the generally accepted lethal dose to dubious self-experiments in the nineteenth century. *Arch Toxicol*. 2014;88(1):5-7.
4. Sungur M, Guven M. Intensive care management of organophosphate insecticide poisoning. *Crit Care*. 2001;5(4), 211-215.
5. Peter JV, Sudarsan TI, Moran JL. Clinical features of organophosphate poisoning: A review of different classification systems and approaches. *Indian J Crit Care Med*. 2014;18(11):735-45.
6. Smolinske SC, Spoerke DG, Spiller SK, Wruk KM, Kulig K, Rumack BH. Cigarette and nicotine chewing gum toxicity in children. *Hum Toxicol*. 1988;7(1):27-31.

PLANTS

1. Lippincott, ed. *Lippincott's Manual of Toxicology*. Philadelphia, PA: Wolters Kluwer/Lippincott Williams & Wilkins Health; 2012.

2. Krenzelok EP, Mrvos R. Friends and foes in the plant world: a profile of plant ingestions and fatalities. *Clin Toxicol (Phila)*. 2011;49(3):142-149.
3. Fuchs J, Rauber-Luthy C, Kupferschmidt H, Kupper J, Kullak-Ublick G, Ceschi A. Acute plant poisoning: analysis of clinical features and circumstances of exposure. *Clin Toxicol (Phila)*. 2011; 49(7):671-680.
4. Chadwick A, Ash A, Day J, Borthwick M. Accidental overdose in the deep shade of night: a warning on the assumed safety of 'natural substances'. *BMJ Case Reports*. 2015; doi:10.1136/bcr-2015-209333.
5. Usatine R, Riojas M. Diagnosis and management of contact dermatitis. *American Family Physician*. 2010; 82(3): 249-255.
6. Schep L, Slaughter RJ, Beasley DM. Nicotinic plant poisoning. *Clin Toxicol (Phila)*. 2009;47(8):771-781.
7. Smith M, Hayoun M. Toxicity, Ricin. In: StatPearls Publishing; updated June 10, 2017.

SPECIAL SYNDROMES

Malignant Hyperthermia Syndrome

1. Litman RS, Rosenberg H. Malignant Hyperthermia: update on susceptibility testing. *JAMA*. 2005;293(23):2918-2924.
2. Rosenberg H, Pollock N, Schiemann A, Bulger T, Stowell K. Malignant Hyperhtermia: a review. *Orphanet J Rare Dis*. 2015;10:93.
3. Schneiderbanger D, Johannsen S, Roewer N, Schuster F. Management of malignant hyperthermia: diagnosis and treatment. *Ther Clin Risk Manag*. 2014;10:355-362.

Neuroleptic Malignant Syndrome

1. Tural U, Onder E. Clinical and pharmacologic risk factors for neuroleptic malignant syndrome and their association with death. *Psychiatry Clin Neurosci*. 2010;64(1):79-87.
2. Caroff SN, Mann SC. Neuroleptic malignant syndrome. *Med Clin North Am*. 1993; 77(1):185-202.
3. Susman VL. Clinical management of neuroleptic malignant syndrome. *Psychiatr Q*. 2001;72(4):325-336.

Serotonin Syndrome

1. Buckley NA, Dawson AH, Isbister GK. Serotonin syndrome. *BMJ*. 2014;348:g1626.
2. Dunkley EJ, Isbister GK, Sibbritt D, Dawson AH, Whyte IM. The Hunter Serotonin Toxicity Criteria: simple and accurate diagnostic decision rules for serotonin toxicity. *QJM*. 2003;96(9):635-642.
3. Boyer EW, Shannon M. The serotonin syndrome. *N Engl J Med*. 2005;352(11):1112-1120.
4. Graudins A, Stearman A, Chan B. Treatment of the serotonin syndrome with cyproheptadine. *J Emerg Med*. 1998;16(4):615-619.
5. Gillman PK. The serotonin syndrome and its treatment. *J Psychopharmacol*. 1999;13(1):100-109.
6. IsbisterGK, BuckleyNA. The pathophysiology of serotonin toxicity in animals and humans: implications for diagnosis and treatment. *Clin Neuropharmacol*. 2005;28(5):205-214.
7. Frank C. Recognition and treatment of serotonin syndrome. *Can Fam Physician*. 2008;54(7):988-992.

SUBSTANCES OF ABUSE

Hallucinogens/Psychotropic Agents

1. Babu K, Boyer EW, Hernon C, Brush ED. Emerging Drugs of Abuse. *Clin Ped Emerg Med*. 2005;6:81-84.
2. Passie T, Halpern JH, Stichtenoth DO, Emrich HM, Hintzen A. The pharmacology of lysergic acid diethylamide: a review. *CNS Neurosci Ther*. 2008;14(4):295-314.
3. Demetriades AK, Wallman PD, BcGuiness A, Gavalas MC. Low cost, high risk: accidental nutmeg intoxication. *Emerg Med J*. 2005;22(3):223-225.

4. Halpern JH. Hallucinogens and dissociative agents naturally growing in the United States. *Pharmacol Ther.* 2004;102(2):131-138.
5. Yan F, Roth BL. Salvinorin A: A novel and highly selective kappa-opioid receptor agonist. *Life Sci.* 2004;75(22):2615-2619.
6. Prybys KM, Hansen KN. Hallucinogens. In: Tintinalli J, Stapczynski J, Ma OJ, Yealy DM, Meckler GD, Cline DM, eds. *Tintinalli's Emergency Medicine: A Comprehensive Study Guide*. 8th ed. New York, NY: McGraw-Hill; 2016.
7. Klock JC, Boerner U, Becker CE. Coma, Hyperthermia and Bleeding Associated with Massive LSD Overdose: A Report of Eight Cases. *West J Med.* 1974;120(3):183-188.
8. Halpern JH, Pope HG Jr. Hallucinogen persisting perception disorder: what do we know after 50 years? *Drug Alcohol Depend.* 2003;69(2):109-119.
9. Babu KM, McCurdy CR, Boyer EW. Opioid receptors and legal highs: *Salvia divinorum* and Kratom. *Clin Toxicol (Phila).* 2008;46(2):146-152.
10. Gonzalez D, Riba J, Bouso JC, Gomez-Jarabo G, Barbanjo MJ. Pattern of use and subjective effects of *Salvia Divinorum* among recreational users. *Drug Alcohol Depend.* 2006;85(2):157-162.

Marijuana

1. Galli JA, Sawaya RA, Friedenberg FK. Cannabinoid Hyperemesis Syndrome. *Curr Drug Abuse Rev.* 2011;4(4):241-249.
2. Katz KD, Leonetti AL, Bailey BC, Surmaitis RM, Eustice ER, Kacinko S, Wheatley SM. Case Series of Synthetic Cannabinoid Intoxication from One Toxicology Center. *West J Emerg Med.* 2016;17(3):290-294.
3. Castaneto MS, Gorelick DA, Desrosiers NA, Hartman RL, Pirard S, Huestis MA. Synthetic Cannabinoids: Epidemiology, Pharmacodynamics, and Clinical Implications. *Drug Alcohol Depend.* 2014;144:12-41.
4. Hermanns-Clausen M, Kneisel S, Szabo B, Auwarter V. Acute toxicity due to the confirmed consumption of synthetic cannabinoids: clinical and laboratory findings. *Addiction.* 2013;108(3): 534-544.
5. Prybys KM, Hansen KN. Hallucinogens. In: Tintinalli J, Stapczynski J, Ma OJ, Yealy DM, Meckler GD, Cline DM, eds. *Tintinalli's Emergency Medicine: A Comprehensive Study Guide*. 8th ed. New York, NY: McGraw-Hill; 2016.
6. Richards JR, Lapoint JM, Burillo-Putze G. Cannabinoid hyperemesis syndrome: potential mechanisms for the benefit of capsaicin and hot water hydrotherapy in treatment. *Clin Toxicol (Phila).* 2018;56(1):15-24.

Sympathomimetics

1. Prosser JM, Perrone J. Cocaine, Methamphetamine and Other Amphetamines. In: Tintinalli J, Stapczynski J, Ma OJ, Cline D, Cydulka R, Meckler G, eds. *Tintinalli's Emergency Medicine: A Comprehensive Study Guide*. 7th ed. New York, NY: McGraw-Hill; 2011:1234-1238.
2. Zimmerman JL. Cocaine Intoxication. *Crit Care Clin.* 2012;28(4):517-526.
3. Donroe JH, Tetrault JM. Substance Use, Intoxication, and Withdrawal in the Critical Care Setting. *Crit Care Clin.* 2017;33(3):543-558.
4. Akerele E, Olupona T. Drugs of Abuse. *Psychiatr Clin North Am.* 2017;40(3):501-517.

TOXIC INHALANTS

Inhaled Gas: Chlorine, Phosgene, Nitric Dioxide

1. Hardison LS Jr, Wright E, Pizon AF. Phosgene exposure: a case of accidental industrial exposure. *J Med Toxicol.* 2014;10(1):51-56.
2. Vajner JE 3rd, Lung D. Case files of the University of California San Francisco Medical Toxicology Fellowship: acute chlorine gas inhalation and the utility of nebulized sodium bicarbonate. *J Med Toxicol.* 2013;9(3):259-265.

3. White CW, Martin JG. Chlorine gas inhalation: human clinical evidence of toxicity and experience in animal models. *Proc Am Thorac Soc*. 2010;7(4):257-263
4. Samal A, Honovar J, White CR, Patel RP. Potential for chlorine gas-induced injury in the extrapulmonary vasculature. *Proc Am Thorac Soc*. 2010;7(4):290-293.
5. Grainge C, Rice P. Management of phosgene-induced acute lung injury. *Clin Toxicol (Phila)*. 2010;48(6):497-508.
6. Brat K, Merta Z, Plutinsky M, Skrickova J, Ing MS. Ice hockey lung – a case of mass nitrogen dioxide poisoning in the Czech Republic. *Can Respir J*. 2013;20(6):e100-e103.

WITHDRAWAL STATES

Ethanol

1. Katz KD. Intravenous multivitamins ("banana bags") for emergency patients who may have nutritional deficits. *Ann Emerg Med*. 2012;59(5):413-414.
2. Long D, Long B, Koifman A. The emergency medicine management of severe alcohol withdrawal. *Am J Emerg Med*. 2017;35(7):1005-1011.
3. Mirijello A, D'Angelo C, Ferrulli A, et al. Identification and management of alcohol withdrawal syndrome. *Drugs*. 2015;75(4):353-365.
4. Schuckit MA. Recognition and management of withdrawal delirium (delirium tremens). *N Engl J Med*. 2014;371(22):2109-2113.
5. Stehman CR, Mycyk MB. A rational approach to the treatment of alcohol withdrawal in the ED. *Am J Emerg Med*. 2013;31(4):734-742.
6. Yanta JH, Swartzentruber GS, Pizon AF. Alcohol Withdrawal Syndrome: Improving Outcomes Through Early Identification and Aggressive Treatment Strategies. *Emerg Med Pract*. 2015;17(6):1-18.
7. Gerrity RS, Pizon AF, King AM, Katz KD, Menke NB. A Patient With Alcoholic Ketoacidosis and Profound Lactemia. *J Emerg Med*. 2016;51(4):447-449.

Opioid/Opiate

1. Gowing L, Ali R, White JM. Opioid antagonists with minimal sedation for opioid withdrawal. *Cochrane Database Syst Rev*. 2017.
2. Gowing L, Farrell M, Ali R, White JM. Alpha2-adrenergic agonists for the management of opioid withdrawal. *Cochrane Database Syst Rev*. 2016.
3. McQueen K, Murphy-Oikonen J. Neonatal Abstinence Syndrome. *N Engl J Med*. 2016;375(25):2468-2479.
4. WHO, WPRO. Clinical Guidelines for Withdrawal Management and Treatment of Drug Dependence in Closed Settings. World Health Organization. 2009.
5. Devenyi P, Mitwalli A, Graham W. Clonidine therapy for narcotic withdrawal. *Can Med Assoc J*. 1982;127(10):1009-1011.
6. Kranzler H, Ciraulo D, Zindel L. Clinical Manual of Addiction Psychopharmacology. 2nd ed. Philadelphia, PA: American Psychiatric Association Publishing; 2014.
7. Routhier DD, Katz KD, Brooks DE. QTc prolongation and torsades de pointes associated with methadone therapy. *J Emerg Med*. 2007;32(3):275-278.
8. Katz KD, Cannon RD, Cook MD, et al. Loperamide-Induced Torsades de Pointes: A Case Series. *J Emerg Med*. 2017;53(3):339-344.
9. Wightman RS, Nelson LS, Lee JD, Fox LM, Smith SW. Severe opioid withdrawal precipitated by Vivitrol. *Am J Emerg Med*. 2018;36(6):1128.e1-1128.e2.

Sedatives and Hypnotics

1. Santos C, Olmedo RE. Sedative-Hypnotic Drug Withdrawal Syndrome: Recognition And Treatment. *Emerg Med Pract*. 2017;19(3):1-20.
2. Ashton H. The diagnosis and management of benzodiazepine dependence. *Curr Opin Psychiatry*. 2005;18(3):249-255.
3. Ni K, Cary M, Zarkowski P. Carisoprodal withdrawal induced delirium: A case study. *Neuropsychiatr Dis Treat*. 2007;3(5):679-682.

