

REFERENCES

1. Gilad R, Izkowitz N, Dabby R, et al: Treatment of status epilepticus and acute repetitive seizures with intravenous valproic acid vs. phenytoin. *Acta Neurol Scand* 118: 296, 2008.
2. Eriksson K, Keränen T, Kälviäinen R: Fosphenytoin. *Expert Opin Drug Metab Toxicol* 5: 695, 2009.
3. Rho JM, Sankar R: The pharmacologic basis of antiepileptic drug action. *Epilepsia* 40: 1471, 1999.
4. Gross DR, Kitzman JV, Adams HR: Cardiovascular effects of intravenous administration of propylene glycol in calves. *Am J Vet Res* 40: 783, 1979.
5. Zosel A, Egelhoff E, Heard K: Severe lactic acidosis after an iatrogenic propylene glycol overdose. *Pharmacotherapy* 30: 219, 2010.
6. Mellick LB, Morgan JA, Mellick GA: Presentations of acute phenytoin overdose. *Am J Emerg Med* 7: 61, 1989.
7. Osorio I, Bernstein TH, Pemler B: Phenytoin induced seizures: a paradoxical effect at toxic concentrations in epileptic patients. *Epilepsia* 30: 230, 1989.
8. Su CM, Kung CT, Wang YC, Lu CH: Life-threatening cardiotoxicity due to chronic oral phenytoin overdose. *Neurol India* 57: 200, 2009.
9. Wyte CD, Berk WA: Severe oral phenytoin overdose does not cause cardiovascular morbidity. *Ann Emerg Med* 20: 508, 1991.
10. Gerber N, Mays DC, Donn KH, et al: Safety, tolerance, and pharmacokinetics of IV doses of the phosphate ester of hydroxymethyl diphenylhydantoin, a new prodrug of phenytoin. *J Clin Pharmacol* 28: 1023, 1988.
11. Leppik IE, Boucher R, Wilder BJ, et al: Phenytoin prodrug, pre-clinical and clinical studies. *Epilepsia* 30(suppl 2): S22, 1989.
12. Chokshi R, Openshaw J, Mehta NN, Mohler E: Purple glove syndrome following intravenous phenytoin administration. *Vasc Med* 12: 29, 2007.
13. Ahn JE, Cloyd JC, Brundage RC, et al: Phenytoin half-life and clearance during maintenance therapy in adults and elderly patients with epilepsy. *Neurology* 71: 38, 2008.
14. Position statement and practice guidelines on the use of multi-dose activated charcoal in the treatment of acute poisoning. American Academy of Clinical Toxicology; European Association of Poisons Centres and Clinical Toxicologists. *J Toxicol Clin Toxicol* 37: 731, 1999.
15. Miller MA, Crystal CS, Patel MM: Hemodialysis and hemoperfusion in a patient with an isolated phenytoin overdose. *Am J Emerg Med* 24: 748, 2006.
16. Eyer F, Felgenhauer N, Pfab R, Thürmel K, Zilker T: Treatment of severe intravenous phenytoin overdose with hemodialysis and hemoperfusion. *Med Sci Monit* 14: CS145, 2008.
17. Ghannoum M, Troyanov S, Ayoub P, Lavergne V, Hewlett T: Successful hemodialysis in a phenytoin overdose: case report and review of the literature. *Clin Nephrol* 74: 59, 2010.
18. Winnicka RI, Topacinski B, Szmyczak WM, et al: Carbamazepine poisoning: elimination kinetics and quantitative relationship with carbamazepine 10,11-epoxide. *J Toxicol Clin Toxicol* 40: 759, 2002.
19. Lifshitz M, Gavrilov V, Sofer S: Signs and symptoms of carbamazepine overdose in young children. *Pediatr Emerg Care* 16:26, 2000.
20. Stremski ES, Brady WB, Prasad K, Hennes HA: Pediatric carbamazepine intoxication. *Ann Emerg Med* 25: 624, 1995.
21. Hojer J, Malmlund HO, Berg A: Clinical features in 28 consecutive cases of laboratory confirmed massive poisoning with carbamazepine alone. *J Toxicol Clin Toxicol* 31: 449, 1993.
22. Brahmi N, Kouraichi N, Abderrazek H, Thabet H, Amamou M: Clinical experience with carbamazepine overdose: relationship between serum concentration and neurological severity. *J Clin Psychopharmacol* 28: 241, 2008.
23. Matos ME, Burns MM, Shannon MW: False-positive tricyclic antidepressant drug screen results leading to the diagnosis of carbamazepine intoxication. *Pediatrics* 105: E66, 2000.
24. Wason S, Baker RC, Carolan P, et al: Carbamazepine overdose: the effects of multiple-dose activated charcoal. *J Toxicol Clin Toxicol* 30: 39, 1992.
25. Tapolyai M, Campbell M, Dailey K, Udvari-Nagy S: Hemodialysis is as effective as hemoperfusion for drug removal in carbamazepine poisoning. *Nephron* 90: 213, 2002.
26. Yildiz TS, Toprak DG, Arisoy ES, et al: Continuous venovenous hemodiafiltration to treat controlled-release carbamazepine overdose in a pediatric patient. *Paediatr Anaesth* 16: 1176, 2006.
27. Pilapil M, Petersen J: Efficacy of hemodialysis and charcoal hemoperfusion in carbamazepine overdose. *Clin Toxicol (Phila)* 46: 342, 2008.
28. Goktas U, Kati I, Yuce HH: Management of a severe carbamazepine overdose with continuous venovenous hemodiafiltration. *Am J Emerg Med* 28: 260.e1, 2010.
29. Li TG, Yan Y, Wang NN, Zhao M: Acute carbamazepine poisoning treated with resin hemoperfusion successfully. *Am J Emerg Med* 29: 518, 2011.
30. Ram Prabahar M, Raja Karthik K, et al: Successful treatment of carbamazepine poisoning with hemodialysis: a case report and review of the literature. *Hemodial Int* 15: 407, 2011.
31. Harder JL, Heung M, Vilay AM, Mueller BA, Segal JH: Carbamazepine and the active epoxide metabolite are effectively cleared by hemodialysis followed by continuous venovenous hemodialysis in an acute overdose. *Hemodial Int* 15: 412, 2011.
32. Loscher W: Effects of the antiepileptic drug valproate on metabolism and function of inhibitory and excitatory amino acids in the brain. *Neurochem Res* 18: 485, 1993.
33. Graudins A, Aaron CK: Delayed peak serum valproic acid in massive divalproex overdose and treatment with charcoal hemoperfusion. *J Toxicol Clin Toxicol* 34: 335, 1996.
34. Andersen GO, Ritland S: Life threatening intoxication with sodium valproate. *J Toxicol Clin Toxicol* 33: 279, 1995.
35. Spiller HA, Krenzelok EP, Klein-Schwartz W, et al: Multicenter case series of valproic acid ingestion: serum concentrations and toxicity. *J Toxicol Clin Toxicol* 38: 755, 2000.
36. Eyer F, Felgenhauer N, Gempel K, et al: Acute valproate poisoning: pharmacokinetics, alteration in fatty acid metabolism, and changes during therapy. *J Clin Psychopharmacol* 25: 376, 2005.
37. Davison AS, Milan AM, Roberts NB: The consequences of valproate overdose. *Clin Chem* 57: 1233, 2011.
38. Chicharro AV, de Marinis AJ, Kanner AM: The measurement of ammonia blood levels in patients taking valproic acid: looking for problems where they do not exist? *Epilepsy Behav* 11: 361, 2007.
39. Bryant AE, Dreifuss FE: Valproic acid hepatic fatalities. III. U.S. experience since 1986. *Neurology* 46: 465, 1996.
40. Koenig SA, Buesing D, Longin E, et al: Valproic acid-induced hepatopathy: nine new fatalities in Germany from 1994 to 2003. *Epilepsia* 47: 2027, 2006.
41. Björnsson E, Olsson R: Suspected drug-induced liver fatalities reported to the WHO database. *Dig Liver Dis* 38: 33, 2006.
42. Vannaprasaht S, Tiamkao S, Sirivongs D, Piyavhatkul N: Acute valproic acid overdose: enhance elimination with multiple-doses activated charcoal. *J Med Assoc Thai* 92: 1113, 2009.
43. Alberto G, Erickson T, Popiel R, et al: Central nervous system manifestations of valproic acid overdose responsive to naloxone. *Ann Emerg Med* 18: 889, 1989.
44. Montero FJ: Naloxone in the reversal of coma induced by sodium valproate. *Ann Emerg Med* 33: 357, 1999.
45. Lheureux PE, Hantson P: Carnitine in the treatment of valproic acid-induced toxicity. *Clin Toxicol (Phila)* 47: 101, 2009.
46. Perrott J, Murphy NG, Zed PJ: L-carnitine for acute valproic acid overdose: a systematic review of published cases. *Ann Pharmacother* 44: 1287, 2010.
47. Mock CM, Schwetschka KH: Levocarnitine for valproic-acid-induced hyperammonemic encephalopathy. *Am J Health Syst Pharm* 69: 35, 2012.
48. Kane SL, Constantiner M, Staubus AE, et al: High-flux hemodialysis without hemoperfusion is effective in acute valproic acid overdose. *Ann Pharmacother* 34: 1146, 2000.
49. Minville V, Roche Tissot C, Samii K: Haemodialysis, L-carnitine therapy and valproic acid overdose. *Ann Fr Anesth Reanim* 23: 357, 2004.
50. Khan E, Huggan P, Celi L, et al: Sustained low-efficiency dialysis with filtration (SLEDD-f) in the management of acute sodium valproate intoxication. *Hemodial Int* 12: 211, 2008.
51. Thanacoody RH: Extracorporeal elimination in acute valproic acid poisoning. *Clin Toxicol (Phila)* 47: 609, 2009.
52. Nasa P, Sehrwati D, Kansal S, Chawla R: Effectiveness of hemodialysis in a case of severe valproate overdose. *Indian J Crit Care Med* 15: 120, 2011.
53. Licari E, Calzavacca P, Warrillow SJ, Bellomo R: Life-threatening sodium valproate overdose: a comparison of two approaches to treatment. *Crit Care Med* 37: 3161, 2009.
54. Wade JF, Dang CV, Nelson L, Wasserberger J: Emergent complications of the newer anticonvulsants. *J Emerg Med* 38: 23, 2010.
55. Fattore C, Perucca E: Novel medications for epilepsy. *Drugs* 71: 2151, 2011.
56. Bialer M: Chemical properties of antiepileptic drugs (AEDs). *Adv Drug Deliv Rev* November 21, 2011. [Epub ahead of print]
57. Johannessen Landmark C, Patsalos PN: Drug interactions involving the new second- and third-generation antiepileptic drugs. *Expert Rev Neurother* 10: 119, 2010.
58. Deeks ED: Retigabine (ezogabine): in partial-onset seizures in adults with epilepsy. *CNS Drugs* 25: 887, 2011.
59. Nagel TR, Schunk JE: Felbamate overdose: a case report and discussion of a new anti-epileptic drug. *Pediatr Emerg Care* 11: 369, 1995.
60. Rengstorff DS, Milstone AP, Seger DL, Meredith TJ: Felbamate overdose complicated by massive crystalluria and acute renal failure. *J Toxicol Clin Toxicol* 38: 667, 2000.
61. Meier KH, Olson KR, Olson JL: Acute felbamate overdose with crystalluria. *Clin Toxicol (Phila)* 43: 189, 2005.
62. Klein-Schwartz W, Shepherd JG, Gorman S, Dahl B: Characterization of gabapentin overdose using a poison center case series. *J Toxicol Clin Toxicol* 41: 11, 2003.
63. Jones H, Aguila E, Farber HW: Gabapentin toxicity requiring intubation in a patient receiving long-term hemodialysis. *Ann Intern Med* 137: 74, 2002.
64. Middleton O: Suicide by gabapentin overdose. *J Forensic Sci* 56: 1373, 2011.
65. Kellinghaus C: Lacosamide as treatment for partial epilepsy: mechanisms of action, pharmacology, effects, and safety. *Ther Clin Risk Manag* 5: 757, 2009.
66. Lofton AL, Klein-Schwartz W: Evaluation of lamotrigine toxicity reported to poison centers. *Ann Pharmacother* 38: 1811, 2004.
67. Sbei M, Campellone JV: Stupor from lamotrigine toxicity. *Epilepsia* 42: 1082, 2001.
68. Daana M, Nevo Y, Tenenbaum A, et al: Lamotrigine overdose in a child. *J Child Neurol* 22: 642, 2007.
69. Reimers A, Reinhold G: Acute lamotrigine overdose in an adolescent. *Ther Drug Monit* 29: 669, 2007.
70. Schwartz MD, Geller RJ: Seizures and altered mental status after lamotrigine overdose. *Ther Drug Monit* 29: 843, 2007.
71. Venkatraman N, O'Neil D, Hall AP: Life-threatening overdose with lamotrigine, citalopram, and chlorpheniramine. *J Postgrad Med* 54: 316, 2008.
72. Nogar JN, Minns AB, Savaser DJ, et al: Severe sodium channel blockade and cardiovascular collapse due to a massive lamotrigine overdose. *Clin Toxicol* 49: 854, 2011.

73. Veerapandian A, Gallentine WB, Winchester SA, et al: Oculogyric crises secondary to lamotrigine overdosage. *Epilepsia* 52: e4, 2011.
74. Dinnerstein E, Jobst BC, Williamson PD: Lamotrigine intoxication provoking status epilepticus in an adult with localization-related epilepsy. *Arch Neurol* 64: 1344, 2007.
75. Waring WS: Lamotrigine overdose associated with generalized seizures. *BMJ Case Rep* February 16, 2009. [Epub ahead of print]
76. Close BR, Banks CJ: Seizures secondary to lamotrigine toxicity in a two-year-old. *Ann Pharmacother* 44: 1112, 2010.
77. Kicka M, Kłopotowski T, Picheta S, Bazylewicz A, Miśkiewicz Ł: Massive lamotrigine poisoning—case report. *Przegl Lek* 68: 543, 2011.
78. Herold TJ: Lamotrigine as a possible cause of QRS prolongation in a patient with known seizure disorder. *CJEM* 8: 361, 2006.
79. French LK, McKeown NJ, Hendrickson RG: Complete heart block and death following lamotrigine overdose. *Clin Toxicol (Phila)* 49: 330, 2011.
80. Nwogbe B, Ferié J, Smith H, et al: Significant lamotrigine overdose associated with acute pancreatitis. *J R Soc Med* 102: 118, 2009.
81. Keränen T, Sorri A, Moilanen E, Ylitalo P: Effects of charcoal on the absorption and elimination of the antiepileptic drugs lamotrigine and oxcarbazepine. *Arzneimittelforschung* 60: 421, 2010.
82. Sirianni AJ, Osterhoudt KC, Calello DP, et al: Use of lipid emulsion in the resuscitation of a patient with prolonged cardiovascular collapse after overdose of bupropion and lamotrigine. *Ann Emerg Med* 51: 412, 2008.
83. Castanares-Zapatero D, Wittebole X, Huberlant V, Morunglav M, Hantson P: Lipid emulsion as rescue therapy in lamotrigine overdose. *J Emerg Med* 42: 48, 2012.
84. Harden C: Safety profile of levetiracetam. *Epilepsia* 42(suppl 4): 36, 2001.
85. Barruet F Jr, Williams K, Howland MA, et al: A case of levetiracetam (Keppra) poisoning with clinical and toxicokinetic data. *J Toxicol Clin Toxicol* 40: 881, 2002.
86. Awaad Y: Accidental overdosage of levetiracetam in two children caused no side effects. *Epilepsy Behav* 11: 247, 2007.
87. Chayasirisobhon S, Chayasirisobhon WV, Tsay CC: Acute levetiracetam overdose presented with mild adverse events. *Acta Neurol Taiwan* 19: 292, 2010.
88. Bodmer M, Monte AA, Kokko J, Yin S: Safety of non-therapeutic levetiracetam ingestions: a poison center based study. *Pharmacoepidemiol Drug Saf* 20: 366, 2011.
89. Kalis MM, Huff NA: Oxcarbazepine, an antiepileptic agent. *Clin Ther* 23: 680, 2001.
90. Raja M, Azzoni A: Oxcarbazepine, risperidone and atenolol overdose with benign outcome. *Int J Neuropsychopharmacol* 6: 309, 2003.
91. Pedrini M, Noguera A, Vinet J, et al: Acute oxcarbazepine overdose in an autistic boy. *Br J Clin Pharmacol* 67: 579, 2009.
92. van Opstal JM, Janknegt R, Cilissen J, et al: Severe overdosage with the antiepileptic drug oxcarbazepine. *Br J Clin Pharmacol* 58: 329, 2004.
93. Furlanlut M, Franceschi L, Poz D, et al: Acute oxcarbazepine, benazepril, and hydrochlorothiazide overdose with alcohol. *Ther Drug Monit* 28: 267, 2006.
94. Wood DM, Berry DJ, Glover G, et al: Significant pregabalin toxicity managed with supportive care alone. *J Med Toxicol* 6: 435, 2010.
95. Spiller HA, Bratcher R, Griffith JR: Pregabalin overdose with benign outcome. *Clin Toxicol (Phila)* 46: 917, 2008.
96. Yoo L, Matalon D, Hoffman RS, Goldfarb DS: Treatment of pregabalin toxicity by hemodialysis in a patient with kidney failure. *Am J Kidney Dis* 54: 1127, 2009.
97. Perucca E, Cloyd J, Critchley D, Fuseau E: Rufinamide: clinical pharmacokinetics and concentration-response relationships in patients with epilepsy. *Epilepsia* 49: 1123, 2008.
98. Spiller HA, Winter ML, Ryan M, et al: Retrospective evaluation of tiagabine overdose. *Clin Toxicol (Phila)* 43: 855, 2005.
99. Cantrell FL, Ritter M, Himes E: Intentional overdose with tiagabine: an unusual clinical presentation. *J Emerg Med* 27: 271, 2004.
100. Winiewski M, Sein Anand J, Chodorowski Z, Kosiska-Tomczyk H: [Tiagabine overdose—report of two cases]. *Przegl Lek* 64: 308, 2007.
101. Forbes RA, Kalra H, Hackett LP, Daly FF: Deliberate self-poisoning with tiagabine: an unusual toxicodrome. *Emerg Med Australas* 19: 556, 2007.
102. Ostrovskiy D, Spanaki MV, Morris GL: Tiagabine overdose can induce convulsive status epilepticus. *Epilepsia* 43: 773, 2002.
103. Fulton JA, Hoffman RS, Nelson LS: Tiagabine overdose: a case of status epilepticus in a non-epileptic patient. *Clin Toxicol (Phila)* 43: 869, 2005.
104. Kazzi ZN, Jones CC, Morgan BW: Seizures in a pediatric patient with a tiagabine overdose. *J Med Toxicol* 2: 160, 2006.
105. Jette N, Cappell J, VanPassel L, Akman CI: Tiagabine-induced nonconvulsive status epilepticus in an adolescent without epilepsy. *Neurology* 67: 1514, 2006.
106. Lofton AL, Klein-Schwartz W: Evaluation of toxicity of topiramate exposures reported to poison centers. *Hum Exp Toxicol* 24: 591, 2005.
107. Lin G, Lawrence R: Pediatric case report of topiramate toxicity. *Clin Toxicol (Phila)* 44: 67, 2006.
108. Winiewski M, Lukasik-Gebocka M, Anand JS: Acute topiramate overdose—clinical manifestations. *Clin Toxicol (Phila)* 47: 317, 2009.
109. Anand JS, Chodorowski Z, Wisniewski M: Seizures induced by topiramate overdose. *Clin Toxicol (Phila)* 45: 197, 2007.
110. Brandt C, Elsner H, Füratsch N, et al: Topiramate overdose: a case report of a patient with extremely high topiramate serum concentrations and nonconvulsive status epilepticus. *Epilepsia* 51: 1090, 2010.
111. Fakhoury T, Murray L, Seger D, et al: Topiramate overdose: clinical and laboratory features. *Epilepsy Behav* 3: 185, 2002.
112. Lynch MJ, Pizon AF, Siam MG, et al: Clinical effects and toxicokinetic evaluation following massive topiramate ingestion. *J Med Toxicol* 6: 135, 2010.
113. Shiber JR: Severe non-anion gap metabolic acidosis induced by topiramate: a case report. *J Emerg Med* 38: 494, 2010.
114. Hoke JF, Yuh I, Antony KK, et al: Pharmacokinetics of vigabatrin following single and multiple oral doses in normal volunteers. *J Clin Pharmacol* 33: 458, 1993.
115. Davie MB, Cook MJ, Ng C: Vigabatrin overdose. *Med J Aust* 165: 403, 1996.
116. Oomen KJ, Mathews S: Zonisamide: a new antiepileptic drug. *Clin Neuropharmacol* 22: 192, 1999.
117. Wightman RS, Zell-Kanter M, Van Roo J, et al: Zonisamide toxicity in a patient with an intentional overdose. *Ann Pharmacother* 45: 547, 2011.
118. Hofer KE, Trachsel C, Rauber-Lüthy C, et al: Moderate toxic effects following acute zonisamide overdose. *Epilepsy Behav* 21: 91, 2011.
119. Sztajnkyrzer MD, Huang EE, Bond GR: Acute zonisamide overdose: a death revisited. *Vet Hum Toxicol* 45: 154, 2003.

USEFUL WEB RESOURCES

- American Association of Poison Control Centers—<http://www.aapcc.org/DNN/>
- American Academy of Clinical Toxicology—<http://www.clintox.org/index.cfm>
- European Association of Poisons Centres and Clinical Toxicologists—<http://www.eapcc.org/>
- Asia Pacific Association of Medical Toxicology—<http://www.asiatox.org/>
- South Asian Clinical Toxicology Research Collaboration—<http://www.sactrc.org/>
- TOXBASE: The primary clinical toxicology database of the National Poisons Information Service (free access for UK National Health Service hospital departments and general practices, and National Health Service departments of public health and health protection agency units; available to hospital EDs in Ireland by contract; available to European poison centers whose staff are members of the European Association of Poisons Centres and Clinical Toxicologists; overseas users may be allowed access on payment of a yearly subscription, subject to the approval of the Health Protection Agency)—<http://www.toxbase.org/>