

Small Doses, Big Trouble

Case 1: A 16 year old girl had been taking two Wellbutrin XL (bupropion) 150 mg each morning for several months. On the morning of admission, she was given 600 mg (two Wellbutrin 300 mg XL tablets) instead of her usual 300 mg. She had a seizure 8 hours after the ingestion.

Case 2: A 56 year old nursing home patient who was prescribed Calan SR (verapamil) 120 mg each day was unintentionally given another patient's meds consisting of one dose each of Cardizem CD (diltiazem) 120 mg, Norvasc (amlodipine) 10 mg and Toprol XL (metoprolol) 50 mg. He developed bradycardia and hypotension requiring the administration of atropine, calcium, glucagon, dopamine and epinephrine.

Case 3: A 35 year old non-diabetic woman took one of her husband's glipizide 10 mg tablet instead of her prednisone and developed symptomatic hypoglycemia.

These cases illustrate that small amounts, even single or double doses, of some drugs can result in significant toxicity. Bupropion, calcium channel blockers, beta blockers and sulfonylureas (e.g. glipizide, glyburide, chlorpropamide) are among the drugs that have a narrow therapeutic range between a beneficial dose and a toxic dose. Other drugs that can be toxic when additional doses are taken include tramadol, clonidine, flecainide, insulin, and some immunosuppressants. Patients taking these drugs therapeutically are at risk for toxicity if they unintentionally take one or more extra doses of their medicines, especially with certain underlying medical conditions or if the amount of drug in each dose is large. Many patients are also taking other drugs which might have an additive effect. There should be a low threshold for hospital referral and transportation by EMS of such patients. Call the Maryland Poison Center for assistance when confronted with patients who have unintentionally taken extra doses of their own medicines or doses of medicines belonging to others.

DID YOU KNOW THAT... some insect repellent products have replaced DEET with less toxic Picaridin?

DEET (N,N-diethyl-M-toluamide) has been known to produce primarily neurologic toxicity (seizures, encephalopathy, coma) with extensive dermal or oral exposure, especially in children. **Picaridin** is reported to be as effective as DEET, safe, and non toxic. It has been used in Europe and Australia since 1998, but just recently became available in the U.S. Picaridin is recommended by the World Health Organization for malaria prevention and by the CDC for West Nile prevention.



Post and share this edition of **toxtidbits** with your colleagues. Send any comments or questions to: **toxtidbits**, 410.706.7184 (fax) or Lbooze@rx.umaryland.edu.

If you do not wish to receive faxes or emails from the Maryland Poison Center, call 410.706.7604 or circle your fax number and fax this back to 410.706.7184. Supported by Maryland Department of Health and Mental Hygiene

Read past issues of **toxtidbits** at www.mdpoison.com