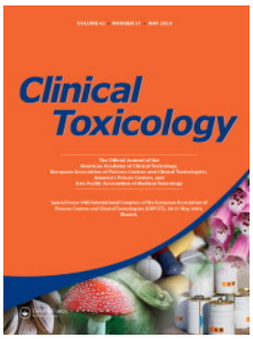

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LETTER

The Benign Clinical Course Following a Large Pediatric Montelukast Ingestion

To the Editor:

Montelukast, a leukotriene receptor antagonist, is indicated for the chronic treatment and prophylaxis of asthma in patients 1 year of age and older. It is relatively well tolerated during therapeutic administration, although serious complications including severe liver injury and a presumptive association with or unmasking of Churg–Strauss syndrome have been described. With regard to acute overdose, a search of the medical literature yielded very few reports involving leukotriene inhibitors. We report the case of a large montelukast ingestion in a pediatric patient that resulted in a benign clinical course.

The mother of a healthy 19-month-old female contacted the local poison control center because her child had ingested a large amount of Singulair® 4 mg chewable tablets 5 min prior. Twenty-eight tablets (112 mg total) were confirmed missing after a detailed pill count was done from a prescription bottle that had been filled 2 days prior. A thorough inspection of the areas surrounding the child was performed but no pills were found. Although this class of medication is generally well tolerated during therapeutic administration, home observation was decided against, due to a combination of factors: the lack of any published overdose data involving this medication, no data on therapeutic use in children of this age, and the large quantity ingested. The mother was instructed to transport the child to the nearest emergency department (ED).

Upon arrival to the ED, the patient was noted to have a normal physical examination and normal vital signs. Activated charcoal was not given because more than 30 min had elapsed since the ingestion occurred. The patient was observed for a 4 h period, remained symptom-free and was discharged home. Upon home follow-up one week later, it was reported that the child had not suffered any ill effects from the exposure.

Montelukast is a potent, competitive and selective antagonist of leukotriene receptors. It has been shown to be effective in the prophylaxis and chronic treatment of asthma. The recommended dose for adults is 10 mg orally once daily, and for children 1 to 5 yrs of age is 4 mg orally once daily. Adverse events associated with therapeutic use appear to be infrequent, with pharyngitis, headache, rhinitis, and diarrhea being the most common (1). There has, however, been a report of severe hepatotoxicity (2) and a presumed association with the development or unmasking of a rare form of systemic vasculitis, Churg–Strauss Syndrome (3–5).

Montelukast appears to have a wide margin of safety in the acute overdose setting. Based on their similar pharmacological and adverse effect profiles (1), other leukotriene inhibitors could be expected to share the same degree of safety in overdose. In the few published reports of acute overdose involving leukotriene inhibitors, significant toxicity has yet to be demonstrated. Geller et al. (6) report a 3-year-old child who ingested up to 65 mg of montelukast tablets, underwent gastric lavage, was given activated charcoal, and had an uneventful outcome. Cobb et al. (7) report two cases of pediatric montelukast overdoses that failed to result in toxicity. One child was observed at home and the other in an emergency department. While

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there is no published overdose data with adults, it appears that single acute overdoses with leukotriene inhibitors do not pose a significant health risk. Our case along with the available literature suggest that acute pediatric overdoses involving leukotriene receptor antagonists can safely be monitored at home without gastrointestinal decontamination.

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