

## Benzonatate (Tessalon®)

Benzonatate is a prescription medication which has been available since 1958 for the treatment of nonproductive cough. It is currently marketed in 100 mg and 200 mg strengths under the brand name Tessalon® and as a generic product. Benzonatate works by suppressing the cough reflex centrally, and via topical anesthetic action on respiratory stretch receptors. The maximum recommended dose for patients over 10 years old is 600 mg daily; the safety and efficacy of benzonatate has not been established in children.

Overdoses of benzonatate may result in seizures, profound CNS depression, hypotension, and cardiac arrhythmias, which may occur within 15 to 20 minutes of ingestion. The duration of action of benzonatate is three to eight hours. A review of benzonatate ingestions reported to the National Poison Data System (NPDS) between 2000 and 2006 concluded that fatalities as a result of benzonatate overdose were due to cardiac dysrhythmias and that doses of 200 mg or greater may produce severe toxicity in children less than 6 years old (*J Med Toxicol* 2010;6:398-402). On December 14, 2010, the FDA issued a statement warning consumers that ingestion of benzonatate by children under the age of ten may result in fatal overdose. An FDA review of the Adverse Event Reporting System (AERS) revealed that 7 of 31 benzonatate overdose cases reported to AERS involved accidental ingestions by patients under the age of 10. Five of these seven cases resulted in deaths, all in children less than 2 years of age (<http://www.fda.gov/Drugs/DrugSafety/ucm236651.htm>). Benzonatate may be attractive to children because the medication is packaged in a yellow round-shaped, liquid-filled gel capsule.



Gastrointestinal decontamination using activated charcoal is recommended in benzonatate overdoses if performed within 1-2 hours of ingestion. Due to the possibility of numbness and decreased gag reflex, caution should be exercised when administering any oral agent. Benzonatate toxicity should be managed with supportive care and treatment of symptoms.

Leah Sera, PharmD  
Pharmacy Practice Resident  
Suburban Hospital

### ***DID YOU KNOW THAT... ipecac syrup is no longer being manufactured?***

Ipecac syrup was approved by the FDA in 1965 as an OTC product to induce vomiting in patients who ingested poisons and drug overdoses. In 2003, the American Academy of Pediatrics announced that it was no longer endorsing that the public keep ipecac in the home or use it for poisonings in response to evidence that it did not change patient outcomes. A few years later, an advisory panel to the FDA recommended that ipecac be moved to prescription-only status. In 2009, ipecac was given to less than 0.03% of all patients reported by U.S. poison centers in the National Poison Data System annual report, compared to 15% of patients in 1985. Paddock Laboratories, the last remaining manufacturer of ipecac syrup, discontinued the product in late 2010.



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](mailto:Lbooze@rx.umaryland.edu).

Subscribe to **ToxTidbits** and read past issues at [www.mdpoison.com](http://www.mdpoison.com)