

Help Doctor Mom avoid overdoses of Tylenol

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Tylenol is safe, effective, and popular. And overdoses can cause nausea and liver damage. Sixty-six US regional poison control centers reported administering an antidote in 10,000 cases of acetaminophen overdose. There were a total of 94 deaths. The majority of overdoses were in adults and most of deaths were suicides. However, 25% of fatal cases were classified as unintentional therapeutic error. The findings led the American Academy of Pediatrics to issue new guidelines¹ calling for routine counseling on how to use Tylenol and other acetaminophen products.

Part of the problem is in packaging and health literacy. There seems to be Tylenol for everything, and acetaminophen is in many different OTC (over the counter) drugs. A parent might give a sick child Tylenol for Cough, Tylenol for Flu, and Tylenol for Fever for several days, and so unintentionally give an overdose.

Parents with low literacy skills often have difficulty determining the proper dosage. For example, they may not distinguish between a tablespoon and a teaspoon or recognize that a measuring teaspoon is not the same as tableware. Fractions are notoriously hard to understand. Or a parent might not differentiate adult Tylenol from Children's Tylenol thinking it is safe to give either in equal amounts.

Most children take Tylenol easily since it is tasty. Around 18 months of age a toddler typically becomes fascinated with containers and good at opening caps. When a toddler figures out how to open the familiar Tylenol bottle, an overdose is a likely result.

It has been impossible to define a toxicity level due to poor recall of amounts given, administration over several days, and the variety of products, some of which are time-release. Also, individual metabolism, condition, nutritional state and drug interactions affect toxicity. Children are at greater risk for reaction to high doses of acetaminophen if they are obese, malnourished or diabetic.

Overdose is easy to treat with an antidote, but hard to recognize since it typically looks like the symptoms that send parent's to the drug store in the first place - nausea, appetite loss, vomiting.

Symptoms of liver damage - the main effect of overdose - are often treated with Tylenol. Acetaminophen overdose should be considered in diagnosing non-specific complaints and any unexplained liver dysfunction.

Tell patients: more is not better

The AAP guidelines urge providers to give parents clear written information and instructions, and to review them at any opportunity. Don't wait for a parent to ask. Since unexplained written material is not useful to everyone, review the information with parents. Often a patient will read and understand information without taking it personally - so a mother may not see that general information on Tylenol relates to her. Make it specific by highlighting pertinent topics, and writing notes in the margin. Tailor your explanation to her situation and her child. Demonstrate how to measure. Confirm understanding by asking your patient to show you how she will measure and give Tylenol when needed.

- Emphasize and repeat: More is not better
- Adult Tylenol is not safe for children
- Many OTC drugs and herbal remedies contain the same medicine as Tylenol, so do not mix drugs, especially cold medicines and pain relievers

1. American Academy of Pediatrics Policy—<http://aappolicy.aappublications.org/cgi/content/full/pediatrics%3b108/4/1020>