Acetaminophen, sold as Tylenol and other brand names such as Paracetamol, Panadol, Tempra and Tapanol, is one of the most popular nonprescription drugs used by parents and pediatricians to treat fever and pain in children. In addition to popular over-the-counter (OTC) preparations, acetaminophen can also be found in combination with many other prescribed products. Due to its increasing popularity, availability and use, acetaminophen is also one of the most common drugs associated with both accidental and intentional poisoning. The American Association of Poison Control Centers received reports of more than 100,000 overdoses involving acetaminophen in 1998.

How does acetaminophen work?
Acetaminophen blocks pain messages to the brain by stopping a chemical called prostaglandin, which causes pain and fever.

What are the dangerous side effects?
While acetaminophen is generally safe for short-term use, and the risk of developing toxic reactions appears to be lower in children than in adults, this drug is widely used among children. Its toxicity related to overdose is a matter of concern. Giving acetaminophen over a long period of time or taking higher than recommended doses of this medication could cause liver and kidney damage and bleeding from the small and large intestines and the stomach.

Who is at risk?
Children with chronic disease, especially liver problems or chronic under-nutrition, are at higher risk for acetaminophen toxicity. Adults who drink alcohol in excess are also at risk and should not take acetaminophen at all.

What are the symptoms and signs of acetaminophen intoxication?
Acetaminophen intoxication typically includes four phases. Symptoms and signs may start with loss of appetite for food, nausea, vomiting and a vague feeling of body discomfort, replaced by abdominal pain, liver enlargement and reduced amount of urine, followed by deterioration in liver functions.

Please note that a known acetaminophen overdose is an emergency situation requiring emergency department care and hospitalization. If the amount of acetaminophen taken is not known, do not wait until symptoms develop to make a decision to seek medical help.

Tips for the safe use of acetaminophen
• It is important to follow the instructions on the bottle when using acetaminophen for yourself or your children.
• Pay attention to recommended dosage, frequency and formulation such as infant, junior, adult-strength. Avoid giving adult preparations to children.
• Be aware that many OTC cold and cough preparations contain acetaminophen. Avoid giving children more than one product containing acetaminophen.
• Inform pharmacists that your child is taking acetaminophen when getting a new prescription.
• Do not exceed the doses or duration for a child’s age included on the product label.
• Avoid using acetaminophen for conditions other than fever or mild to moderate pain.

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