Acetaminophen overdose and liver damage

Acetaminophen is the generic name of an active ingredient found in many over-the-counter (OTC) products and prescription medications. Acetaminophen also is known by various OTC brand names, such as Tylenol (McNeil Consumer Healthcare, Fort Washington, Pa.). The drug also is used in combination with other active ingredients, called “combination medicines,” to treat symptoms of colds and influenza (flu), allergy and insomnia. Prescription drugs (such as Vicodin, Abbott Laboratories, Abbott Park, Ill.) contain acetaminophen and other active ingredients to help relieve pain.

ACETAMINOPHEN TOXICITY

Acetaminophen-containing products are safe and effective when used according to their label instructions and your dentist’s or physician’s directions. The recommended maximum daily dose is 4,000 milligrams.1 Taking more than this amount, particularly for several or more days, can cause liver damage. In the United States, acetaminophen overdose is the primary cause of acute liver failure.2,3 You can quickly reach and exceed the maximum daily dose of OTC and prescription products4,5 without realizing it. This can happen when you take multiple products such as cold medications and pain relievers.

COMMON SIGNS AND SYMPTOMS

Common signs and symptoms of possible liver damage include abnormally yellow skin and eyes (jaundice), dark urine, light-colored stools, nausea, vomiting and loss of appetite. Because these signs and symptoms are similar to those of flu, you may not notice them for several days if you believe they are related to your initial illness. Serious cases of liver disease can lead to mental confusion, coma and death.

RISK OF OVERDOSE IN CHILDREN

Your child is at risk of experiencing an overdose if you administer the adult formulation or the wrong pediatric formulation, calculate the wrong dose for your child’s weight, or use the wrong dosing device. To avoid these errors, you should use the measuring tool packaged with the medicine and keep a record of the treatment times and the doses you give your child.

WHEN NOT TO TAKE ACETAMINOPHEN

You should not take acetaminophen-containing products if you consume three or more alcoholic drinks per day,2,6,7 have abused alcohol,6 have active liver disease or have had liver damage, have advanced kidney disease,9 are malnourished or are fasting10 or are taking warfarin (for example, Coumadin, Bristol-Meyers Squibb, New York City) and plan to take acetaminophen for more than a few days, because the acetaminophen may increase your risk of experiencing bleeding.

If you have any of these conditions, tell your dentist or physician. You can determine if an OTC medicine contains acetaminophen by checking the product’s drug facts label under the heading “active ingredients.” If you don’t know the active ingredients of your prescription medicines, ask your dentist or physician. You should follow all directions on the drug facts label, prescription label or both.

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10. Whitcomb DC, Block GD. Association of acetaminophen hepatotoxicity with fasting and ethanol use. JAMA 1994;272(23):1845-1850.