Dangers of Tylenol (Acetaminophen)

Dan Murphy, DC

In 1994, researchers from Johns Hopkins Medical School published in the New England Journal of Medicine an article noting (1):

Risk of Kidney Failure Associated With the Use of Acetaminophen, Aspirin, and Nonsteroidal Anti-inflammatory Drugs

New England Journal of Medicine

December 22, 1994.

"People who take analgesic drugs frequently may be at increased risk of end-stage renal disease (ESRD)."

"Heavier acetaminophen use was associated with an increased risk of end-stage renal disease in a dose-dependent fashion."

Those who took 105 – 365 acetaminophen pills per year had a 40%increased risk of end-stage renal disease compared to those who took 2 –104 acetaminophen pills per year. For some, the risk of end-stage renal disease was as great as a 140% increased risk.

For those who took more than 365 acetaminophen pills in a year, the increased risk of end-stage renal disease was 110%. For some, the increased risk of end-stage renal disease was as high as 270%.

For those who took more than 1000 pills containing acetaminophen in their lifetime (compared to those who took fewer than 1000 acetaminophen–containing tablets), their increased risk of end-stage renal disease was 100%. For some, the increased risk of end-stage renal disease was as high as 220%.

For those who took more than 5,000 pills containing acetaminophen in their lifetime, their increased risk of end-stage renal disease was 140%. For some, the increased risk of end-stage renal disease was as high as 380%.

The increased risk for end-stage renal disease noted in this study was adjusted for race, sex, age, and intake of other analgesic drugs. The authors noted that 8 - 10 % of the overall incidence of end-stage renal disease is attributable to acetaminophen use. The authors concluded, "People who often take acetaminophen have an increased risk of end-stage renal disease."

In 1997, researchers from the Department of Internal Medicine, University of Texas Southwestern Medical Center, published in the New England Journal of Medicine an article noting (2):

Acetaminophen Toxicity in an Urban County Hospital

New England Journal of Medicine

October 16, 1997

Acetaminophen ingestion accounts for 12% of all patients hospitalized with drug overdoses.

Acetaminophen ingestion accounts for 40% of patients with acute liver failure.

In 2004, Tim Davern, MD, a liver transplant specialist at the University of California, San Francisco, published (3):

The Danger of Mixing Candy And Poison

San Francisco Chronicle

August 14, 2004

"First Do No Harm" is a cornerstone of modern medicine.

"I think the practice of combining acetaminophen (Tylenol is one popular brand) and an opiate, such as hydrocodone bitartrate, together as a single drug (as Vicodin does) defies logic, if not common sense."

Acetaminophen is a "potent dose-dependent poison for the liver; simply stated, if you take too much, your liver dies."

Acetaminophen overdose is the "leading cause of acute liver failure in the United States today."

On the other hand, opiates, such as hydrocodone bitartrate and codeine, while safe for the liver, are highly addictive. "Vicodin is currently the most popular prescription drug in the United States."

Some patients become addicted to the opiate component of Vicodin and consume increasing amounts of acetaminophen, "ultimately leading to acute liver failure."3

"With overwhelming liver injury from acetaminophen, what follows is a particularly grisly death punctuated by bleeding, confusion, coma, brain swelling, damage and death."

"Patients typically take too much acetaminophen for fever or pain over several days, not realizing the potential for liver damage."

"Many are unaware that acetaminophen is contained in dozens of over-the-counter cold and flu preparations."

"This situation is particularly tragic in young children accidentally overdosed with acetaminophen, typically in the setting of a flu-like illness, by well-intentioned but misinformed parents."

Acetaminophen packaging should have better warning labels, and should not be sold in 1,000 pill mega-bottles.

Acetaminophen-opiate combinations [like Vicodin] should be removed from the market.

"The prescription rules in California have made it far easier for physicians to prescribe an acetaminophen-opiate combination, such as Vicodin, than a pure opiate, such as codeine, although the former is far more dangerous."

The FDA banned Ephedra, which "contrasts with its puzzling, relatively meager efforts to prevent acetaminophen hepatotoxicity, which kills far more Americans each year than Ephedra."

In 2006, regular PARADE columnist Isadore Rosenfeld, MD, publishes (4):

Take This Painkiller Carefully

Medical News That Matters

Second Opinion

By Isadore Rosenfeld, MD

Parade, February 19, 2006, pg. 6

"Acetaminophen, whose best known brand name is Tylenol, is one of the most widely used non-prescription painkillers is the US."

"Overdosing with it is the leading cause of serious poisoning in this country."

"Every year, too much acetaminophen accounts for 50,000 emergency room visits, 42% of liver failures, and an average of 458 deaths."4

"Never take more than 4,000mg a day—eight 500mg extra-strength capsules."

Numerous other drugs also contain acetaminophen, including Nyquil, Sudafed, Alka-Seltzer, Sinutab, Contac, Actifed, etc.

"If you have two or three alcoholic drinks or more a day, be sure to consult your doctor before taking Tylenol."

"The symptoms of acetaminophen overdose are nausea, vomiting, abdominal pain and lack of appetite." [NOTE: these are symptoms that some may take Tylenol for, flu-like symptoms.]

"The specific antidote is N-acetylcysteine (NAC)." N-acetylcysteine (NAC) works to save the liver following acetaminophen poisoning because it elevates levels of the antioxidant and detoxifier, glutathione

(5). I purchase N-acetylcysteine (NAC) in the product Complete Glutathione From Nutri-West.

In 2005, researchers associated with Harvard Medical School published in the American Heart Association journal Hypertension, an article noting (6):

Non-Narcotic Analgesic Dose and Risk of Incident Hypertension in US Women

Hypertension

September 2005

Acetaminophen [Tylenol, Atasol, Anacin-3, Panadol, Excedrin {has acetaminophen, aspirin, and caffeine}], is one of the most commonly used drugs in the United States.

Compared with women who did not use acetaminophen, older women who took >500 mg per day had a 93% increased risk of hypertension.

Younger women who took >500 mg per day of acetaminophen had a 99% increased risk of hypertension.

Compared with non-users of acetaminophen, older women who consumed >500 mg per day for headache had a 240% increased risk of hypertension.

Compared with non-users of acetaminophen, younger women who consumed >500 mg per day for headache had a 370% increased risk of hypertension.5

Higher daily doses of acetaminophen significantly increase the risk of hypertension in women.

Acetaminophen [Tylenol, etc.] impairs renal function by depleting glutathione, leading to renal endothelial dysfunction. Clinicians commonly do NOT understand that acetaminophen is NOT safe, and causes significant hypertension.

There are three nutritional strategies to boost levels of glutathione to protect oneself or patients against the toxicity of acetaminophen (Tylenol) and other drugs, as well as protect our bodies from other toxins such as mercury, lead, cadmium and aluminum (5):

1) Take B6, B12, Folic Acid: they help the body convert the harmful amino acid homocysteine into the beneficial amino acid cysteine. Cysteine is the rate-limiting factor in the construction of the antioxidant/detoxifier glutathione. (I use Complete Omega-3 Co-Factors From Nutri-West).

2) As noted above, take N-Acetyl Cysteine, or NAC. (I use Complete Glutathione From Nutri-West:).

3) Consume undenatured whey protein. According to Dr. Gutman (5), undenatured whey protein is probably the best method to elevate one's levels of glutathione. The Nutri-West product is called Complete Whey-G.

References

1) Perneger TV, Whelton PK, Klag MJ; Risk of kidney failure associated with the use of acetaminophen, aspirin, and nonsteroidal antiinflammatory drugs; New England Journal of Medicine; Dec. 22, 1994;331(25):1675-9.

2) Schiodt FV, Rochling FA, Casey DL, Lee WM; Acetaminophen toxicity in an urban county hospital; New England Journal of Medicine; Oct 16, 1997; 16;337(16):1112-7.

3) Davern T; The Danger Of Mixing Candy And Poison; San Francisco Chronicle; August 14, 2004.

4) Rosenfeld I; Take This Painkiller Carefully; Medical News That Matters, Second Opinion; Parade, February 19, 2006, pg. 6.

5) Gutman J; Glutathione, Your Body's Most Powerful Protector, Kudo.ca Communications, 2002.

6) Forman JP, Stampfer MJ; Curhan GC; Non-Narcotic Analgesic Dose and Risk of Incident Hypertension in US Women; Hypertension; September 2005;46:500.