Most Acetaminophen Overdoses Don't Harm Liver

BY MITCHEL L. ZOLER
Philadelphia Bureau

Patients hospitalized for acetaminophen overdose had a 4.5% rate of acetaminophen-induced hepatotoxicity in a population-based study, Dr. Robert P. Myers and his associates said.

In a multivariate analysis of residents of Calgary and southern Alberta (Canada) during 1995-2004, significant risk factors for acetaminophen hepatotoxicity were alcohol abuse, preexisting liver disease, and unintentional ingestion, the authors said (Clin. Gastroenterol. Hepatol. 2008 August [Epub doi:10.1016/j.cgh.2008.02.053]).

In patients with none of these risk factors, 1.3% developed hepatotoxicity. In those with one risk factor, the hepatotoxicity rate rose to 5%. It was 19% in patients with two risk factors and 52% in those with all three risk factors, wrote Dr. Myers, who is from the liver unit in the department of medicine at the University of Calgary, and his colleagues.

The findings—based on 1,680 hospital admissions for acetaminophen overdose—also highlighted the clinical impact that acetaminophen-induced hepatotoxicity can have. Patients who developed this complication following an acetaminophen overdose were 2.5-fold more likely to be admitted to an ICU, and were 40-fold more likely to die while hospitalized, compared with patients who did not have hepatotoxicity following their overdose.

After case-mix adjustment, those who developed hepatotoxicity had a hospital length of stay that was 50% greater, and hospital costs that were double the level of patients without hepatotoxicity.

But the findings "reassuringly" showed that acetaminophen hepatotoxicity is uncommon following an overdose, supporting the "relatively benign" nature of most overdoses. More than 95% of the overdose episodes did not result in liver damage, the authors said. ■