Liver Researchers Say Acetaminophen-Related Overdose May Soon Be Treatable

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Acetaminophen, the active ingredient in Tylenol, is one of the most widely used painkillers in the world. It is also one of the leading causes of acute liver failure in the United States. Acetaminophen poisoning is not only untreatable, but it can be fatal.. However, a new study published online in Scientific Reports suggests that medical researchers may soon figure out how to reverse damage caused by the common over-the-counter (OTC) medication, Medical Daily reports.

It is estimated that nearly 300 Americans die every year due to acetaminophen-related liver damage. Known as paracetamol in Europe, the drug is effective for treating headaches, fever and mild pain. Acetaminophen is harmless in low doses, even for people with liver disease. However, the OTC painkiller is also known to cause liver injury and death when taken at just twice the maximum recommended dose.

In this latest study, researchers from the University of Edinburgh explained their efforts to develop a reliable method of using human liver cells to test the effects of acetaminophen on the organ. Previously, these tests were conducted on animals, which can be an unreliable method for determining the effects of drugs on humans. The researchers hope that the new test will lead to new potential targets for acetaminophen-overdose-reversing drugs.

According to the report, too much acetaminophen can cause so much damage to liver tissue that it is unable to repair itself. This leads to acute liver failure, which causes a rapid deterioration of liver function and leaves the body unable to fight off infections and clean the blood.

Why would people take too much acetaminophen in the first place? Studies show that roughly half of acetaminophen-related deaths are the result of suicide. The rest are unintentional overdoses, which often occur because people are unaware that the painkiller is added to many other medications, including cold remedies, sleeping pills and cough syrups. Acetaminophen is also known to be more deadly among people with chronic liver problems, such as hepatitis C virus (HCV), because their livers may have difficulty metabolizing the medication.

Researchers hope this study will lead to a better understanding of the biology behind liver damage

caused by acetaminophen overdose and potentially to new treatments for reversing the problem. If successful, the findings could also lead to the discovery of methods of reversing liver damage caused by other conditions, such as hepatitis C, fatty liver disease and more.

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