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Antibiotic Can Reduce Hospitalization for Rare Brain Disorder, Analysis Shows

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(PhysOrg.com) -- A study analysis by researchers at the University of Cincinnati confirms that the antibiotic rifaximin can reduce hospitalizations of patients with a certain brain disorder caused by liver failure.

These findings were presented May 31 at the annual Digestive Disease Week (DDW) medical meeting in Chicago.

Guy Neff, MD, associate professor of medicine, hepatology and transplant, with colleagues in the digestive diseases division, found that rifaximin significantly reduced the risk of hepatic encephalopathy-related hospitalizations when compared to a placebo drug.

Hepatic encephalopathy, or HE, is a potentially reversible neuropsychiatric abnormality that can result due to liver failure.

“When there is severe damage to the liver, toxic substances that are normally removed by the liver accumulate in the blood and impair the brain,” says Neff, director of liver transplantation and a specialist with UC Physicians. “Signs of HE can include impaired cognition, asterixis—or a wrist tremor—and a decreased level of consciousness including coma, cerebral edema and possibly death.”

Rifaximin is approved to treat traveler’s diarrhea and has been granted orphan drug designation for the treatment of hepatic encephalopathy by the U.S. Food and Drug Administration.

Researchers analyzed a randomized, double-blind, placebo-controlled study of 299 patients with a history of HE—meaning patients and researchers were not told whether they were receiving/giving rifaximin or the placebo drug.

They found that patients who took rifaximin as opposed to the placebo had 50 percent less risk of being hospitalized.

On average, for every nine patients treated with rifaximin, one fewer patient was hospitalized due to HE.

“This new data solidly supports the clinical efficacy of rifaximin in reducing the risk of HE-related hospitalization,” Neff says. “As demonstrated in previously published pharmacoeconomic data, reducing recurrent HE events may reduce the need for HE-related hospitalization, thereby potentially decreasing the costs of care.”

Neff has received no honoraria from the makers of rifaximin.

Provided by University of Cincinnati (news : web)