

Popular stomach acid reducer triples risk of developing pneumonia

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A popular stomach-acid reducer used to prevent stress ulcers in critically ill patients needing breathing machine support increases the risk of those patients contracting pneumonia threefold, according to researchers at Wake Forest University School of Medicine.

Hospital-acquired [pneumonia](#) is the leading cause of infection-related deaths in critically ill patients. It increases hospital stays by an average of seven to nine days, cost of care, and the risk of other complications.

"As best we can tell, patients who develop hospital-acquired pneumonia or ventilator-acquired pneumonia have about a 20 to 30 percent chance of dying from that pneumonia," said senior study author David L. Bowton, M.D., professor and head of the Section on Critical Care in the Department of Anesthesiology. "It's a significant event."

The study, published in a recent issue of *Chest*, compared treatment with two drugs that decrease [stomach acid](#): ranitidine, marketed under the name Zantac™, and pantoprazole, marketed under the name Protonix™ or Prilosec™.

Both drugs decrease stomach acid, but the newer pantoprazole is considered more powerful and has become the drug of choice in many hospitals.

However, in the analysis of 834 patient charts, the researchers found that hospitalized cardiothoracic surgery patients treated with pantoprazole

were three times more likely to develop pneumonia.

"We conducted this study, in part, because we thought we were seeing more pneumonias than we were used to having," said study co-author Marc G. Reichert, Pharm.D., pharmacy coordinator for surgery at Wake Forest University Baptist Medical Center.

Both acid-reducing drugs can make the stomach a more hospitable place for bacteria to colonize. Patients on breathing machines sometimes develop pneumonia when stomach secretions reflux into the lungs.

Current treatment guidelines to prevent pneumonia recommend raising the head of the bed for patients on breathing machines, which reduces the risk of stomach secretions getting into the lungs.

But the study's findings suggest some other steps could keep critically ill patients from developing ventilator-associated pneumonia.

Doctors should consider whether an acid reducer is needed at all, Bowton said. The occurrence of stress ulcer bleeding has gone down in recent years, perhaps because patients with breathing tubes are fed earlier, and food in the stomach may neutralize or reduce the effects of stomach acid.

Bowton added that in cases where an acid reducer is needed, ranitidine is recommended, given the apparent decreased risk in developing pneumonia.

Doctors should stop using the drug as soon as the risk of bleeding passes - once the patient is off the breathing machine and eating, either on his/her own or through a feeding tube.

"Stopping the drugs earlier appears to be the best thing for patients,"

Reichert said.

Source: Wake Forest University Baptist Medical Center ([news](#) : [web](#))

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