Researchers at the University of Exeter have found a statistical link between pneumonia in older people and a group of medicines commonly used to neutralise stomach acid in people with heartburn or stomach ulcers. Although proton-pump inhibitors (PPIs) are still a valuable group of medicines, research is indicating that PPIs are not as completely safe for older people as previously thought.

PPIs are medicines commonly prescribed to reduce gastric acid and to protect the stomach. Approximately 40 percent of older adults receive PPIs, although according to some experts, up to 85 percent of people who receive PPI prescriptions may not need them.

Researchers say people should not stop using their PPI medication, but should discuss whether the PPIs are still needed with their prescribing healthcare professional. Just stopping PPIs could be dangerous as PPIs are very useful, for example for preventing stomach bleeds in some patients.

Once thought to be relatively harmless, PPIs have more recently been linked to increased rates for certain health concerns like fractures, cardiovascular disease, and some bacterial infections.

The association between PPI use and pneumonia was studied because stomach acid is a barrier to infections spreading from the gut in people with stomach reflux. Since pneumonia is a major cause of death in this country for older adults, it is important for healthcare providers to understand the links between PPIs and pneumonia.

The Exeter team designed a study to look at statistical links between long-term PPI use and pneumonia in older adults in medical records. Their study was published in the Journal of the American Geriatrics Society.

David Melzer, Professor of Epidemiology and Public Health at the University of Exeter Medical School, said: "This study shows that there was a higher rate of pneumonia in older people who received PPIs over a two year period. Caution is needed in interpreting the findings as our study is based on analyzing data from medical records, so other factors may be involved. However, our study adds to growing evidence that PPIs are not quite as safe as previously thought, although they are still a very useful class of medication for certain groups of patients."

The researchers used information from Clinical Practice Research Datalink (CPRD) for England, a large database containing records from many primary care practices in the U.K. They selected patients 60-years-old and older who had taken prescribed PPIs regularly and who also had previous regular medical records. The researchers identified more than 75,000 older adults who were treated with PPIs.

As with all prescription medications, users should regularly review use of medicines like PPIs with healthcare providers to make sure each prescription is still needed. The researchers noted that patients should not stop taking PPIs themselves without consulting with healthcare professionals.