Proton-Pump Inhibitors to Prevent Gastrointestinal Bleeding

A recent systematic review evaluated the effectiveness and safety of proton-pump inhibitors (PPIs) for preventing stress ulcers in critically ill patients.

The review included randomised trials that compared PPIs with placebo or no prophylaxis in critically ill adults. Meta-analyses were performed, and evidence was assessed using the Grading of Recommendations, Assessment, Development, and Evaluations (GRADE) approach. A subgroup analysis explored the effect of PPIs on mortality based on disease severity. This analysis combined within-trial subgroup data from the two largest trials and assessed credibility with the Instrument for Assessing the Credibility of Effect Modification Analyses.

The review included 12 trials with a total of 9,533 patients. PPIs were found to reduce the incidence of clinically important upper gastrointestinal bleeding with high certainty. PPIs may have little or no effect on mortality. Subgroup analysis suggested that the effect of PPIs on mortality might differ based on disease severity, with intermediate credibility. PPIs may reduce 90-day mortality in less severely ill patients and may increase mortality in more severely ill patients. PPIs may have no effect on pneumonia and little or no effect on Clostridioides difficile infection.

High-certainty evidence supports that PPIs are associated with decreased upper gastrointestinal bleeding. PPIs may have little or no effect on overall mortality. However, there is a possibility that PPIs could decrease mortality in less severely ill patients and increase mortality in more severely ill patients.

Source: NEJM Evidence
Image Credit: iStock

Published on : Tue, 18 Jun 2024

© For personal and private use only. Reproduction must be permitted by the copyright holder. Email to copyright@mindbyte.eu.