



AC034

Adult Cardiology & Clinical Cardiovascular Medicine • Poster Presentation

PROTON PUMP INHIBITORS AS A RISK FACTOR FOR HEART FAILURE AND THEIR IMPACT ON EXISTING HEART FAILURE: A NARRATIVE SYNTHESIS

Layan Aldib, Hatem Yaser, Javier Ascencio-Guerrero, Karas Mina, Nmesomachi Okoronkwo, Sama Elzambily, Nourhan Rezk, Jad Yacoub, Dalia Mohammed, Kenny Quach.

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Proton pump inhibitors (PPIs) are among the most widely prescribed medications worldwide, yet chronic use has been increasingly associated with adverse systemic effects, raising concern particularly in heart failure (HF) populations. Despite growing interest, evidence on the cardiovascular safety of PPIs in HF patients remains heterogeneous and inconclusive. This narrative synthesis aimed to synthesize available literature on the association between PPI use and HF. A systematic literature search of PubMed, Web of Science, and Embase identified 26 original studies, evaluated using RoB 2 and ROBINS-I tools. In HF-naïve populations, PPI use was an independent risk factor for incident HF in the majority of studies, with significant risk emerging after more than 5.1 years of exposure. Among patients with established HF, PPI use was associated with increased hospital-acquired pneumonia, muscle wasting, and hypomagnesemia-related hospitalizations, though mortality findings remained conflicting. These findings highlight the need for proactive deprescribing protocols, routine electrolyte monitoring, and careful reassessment of PPI indications in vulnerable HF cohorts.

Keywords: proton pump inhibitors, heart failure, cardiovascular outcomes, hypomagnesemia, pharmacoepidemiology, drug safety.