

# Proton Pump Inhibitor Therapy for Suspected GERD-Related Chronic Laryngitis: A Meta-Analysis of Randomized Controlled Trials

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- OBJECTIVE:** The role of proton pump inhibitors (PPIs) in suspected GERD-related chronic laryngitis (CL) is controversial. Hence, we performed a meta-analysis of the existing randomized controlled trials (RCTs) to evaluate the efficacy of PPIs in this disorder.
- METHODS:** Data extracted from MEDLINE (1966 to August 2005), Cochrane Controlled Trials Register (1997 to August 2005), EMBASE (1980 to August 2005), ClinicalTrials.gov website, and meetings presentations (1999–2005). Published and unpublished randomized placebo-controlled trials of PPIs in suspected GERD-related CL were selected by consensus. Random effects model was utilized with standard approaches to quality assessment, sensitivity analysis, and an exploration of heterogeneity and publication bias. The primary outcome measure was defined as the proportion of patients with  $\geq 50\%$  reduction in self-reported laryngeal symptoms.
- RESULTS:** Pooled data from 8 studies (N = 344, PPI 195, placebo 149; mean age 51 yr; males 55%; study duration 8–16 wk) were analyzed. No significant quantitative heterogeneity was found among the studies ( $\chi^2 = 11.22$ ,  $P = 0.13$ ). Overall, PPI therapy resulted in a nonsignificant symptom reduction compared to placebo (relative risk 1.28, 95% confidence interval 0.94–1.74). No clinical predictors of PPI response were identified on meta-regression analysis done at study level.
- CONCLUSIONS:** PPI therapy may offer a modest, but nonsignificant, clinical benefit over placebo in suspected GERD-related CL. Validated diagnostic guidelines may facilitate the recognition of those patients most likely to respond favorably to PPI treatment.

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