

## **Treatment of Unexplained Chronic Cough:**

Peter Gibson, MBBS; Gang Wang, MD, PhD; Lorcan McGarvey, MD; Anne E. Vertigan, PhD, MBA, BAppSc (SpPath); Kenneth W. Altman, MD, PhD; Surinder S. Biring, MB ChB, MD

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**Background** Unexplained chronic cough (UCC) causes significant impairments in quality of life. Effective assessment and treatment approaches are needed for UCC.

**Methods** This systematic review of randomized controlled trials (RCTs) asked: What is the efficacy of treatment compared with usual care for cough severity, cough frequency, and cough-related quality of life in patients with UCC? Studies of adults and adolescents aged > 12 years with a chronic cough of > 8 weeks' duration that was unexplained after systematic investigation and treatment were included and assessed for relevance and quality. Based on the systematic review, guideline suggestions were developed and voted on by using the American College of Chest Physicians organization methodology.

**Results** Eleven RCTs and five systematic reviews were included. The 11 RCTs reported data on 570 participants with chronic cough who received a variety of interventions. Study quality was high in 10 RCTs. The studies used an assortment of descriptors and assessments to identify UCC. Although gabapentin and morphine exhibited positive effects on cough-related quality of life, only gabapentin was supported as a treatment recommendation. Studies of inhaled corticosteroids (ICS) were affected by intervention fidelity bias; when this factor was addressed, ICS were found to be ineffective for UCC. Esomeprazole was ineffective for UCC without features of gastroesophageal acid reflux. Studies addressing nonacid gastroesophageal reflux disease were not identified. A multimodality speech pathology intervention improved cough severity.

**Conclusions** The evidence supporting the diagnosis and management of UCC is limited. UCC requires further study to establish agreed terminology and the optimal methods of investigation using established criteria for intervention fidelity. Speech pathology-based cough suppression is suggested as a treatment option for UCC. This guideline presents suggestions for diagnosis and treatment based on the best available evidence and identifies gaps in our knowledge as well as areas for future research.