A Symphony of Strategies: Non-Pharmacologic Therapies for Resistant Chronic Coughs.

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Description

Chronic refractory cough is a challenging and persistent condition characterized by a cough that persists despite comprehensive investigation and appropriate treatment. This vexing condition significantly impacts the quality of life for affected individuals and often requires a multidisciplinary approach for effective management. Chronic refractory cough poses a significant clinical challenge, often resistant to conventional treatments. The comprehensive review of non-pharmacologic therapeutic approaches for managing chronic refractory cough. From lifestyle modifications to emerging interventions, evidence supporting the efficacy of various non-pharmacologic strategies. Understanding and implementing these approaches are essential for improving patient outcomes and addressing the complex nature of chronic refractory cough [1].

Chronic refractory cough is typically defined by a cough that persists for more than eight weeks, despite thorough evaluation and treatment. This prolonged duration distinguishes it from acute or subacute coughs. What sets chronic refractory cough apart is its resistance to standard cough treatments. Individuals with this condition often do not experience relief from common interventions such as antitussive medications, corticosteroids, or antibiotics [2].

Conditions such as rhinosinusitis and postnasal drip are commonly associated with chronic cough. Despite treating these conditions, some individuals continue to experience persistent cough, leading to the classification of refractory cough [3].

Chronic refractory cough is a persistent and debilitating condition that can significantly impact the quality of life for affected individuals. While pharmacologic interventions remain a cornerstone in cough management, a growing body of evidence supports the effectiveness of non-pharmacologic therapies. This manuscript aims to provide an overview of non-pharmacologic interventions for chronic refractory cough, highlighting lifestyle modifications, behavioral strategies, and emerging therapeutic modalities [4].

Certain dietary factors, such as gastroesophageal reflux-inducing foods, may contribute to chronic cough. This section explores the role of dietary modifications, including avoiding trigger foods and adopting an anti-reflux diet, in alleviating cough symptoms. Adequate hydration is crucial for maintaining respiratory health. The importance of maintaining proper hydration and explores the potential benefits of various fluids in managing chronic refractory cough [5].

Speech and swallowing therapies, often used in the management of chronic cough, aim to address dysfunctional vocal cord movements and laryngeal hypersensitivity. The evidence supporting these interventions and their impact on cough symptomatology. Cognitive Behavioral Therapy (CBT) has shown promise in addressing the psychosocial aspects of chronic cough. Exploring the role of CBT in reframing cough perceptions, managing anxiety, and breaking the cough cycle provides valuable insights into its potential benefits [6].

Respiratory rehabilitation, including breathing exercises and techniques, plays a pivotal role in managing chronic refractory cough. This section discusses diaphragmatic breathing, pursed-lip breathing, and inspiratory muscle training as potential interventions to improve respiratory function and reduce cough severity [7].

Effective airway clearance is essential in managing chronic cough associated with mucus hypersecretion. The various airway clearance techniques, including oscillatory positive expiratory pressure devices and high-frequency chest wall oscillation, highlighting their potential benefits in refractory cases [8].

Innovative approaches like neuromodulation techniques, including transcutaneous vagus nerve stimulation, are gaining attention for their potential in modulating cough reflex sensitivity. The emerging evidence and challenges associated with incorporating neuromodulation into the management of chronic refractory cough.

Speech pathology interventions, such as laryngeal desensitization therapy, offer targeted approaches to address laryngeal hypersensitivity. This section delves into the evidence supporting these interventions and their role in the multidisciplinary management of chronic cough [9].

The comprehensive overview of non-pharmacologic therapies for the management of chronic refractory cough. From lifestyle modifications and behavioral interventions to emerging therapies, a holistic and individualized approach is essential for improving patient outcomes. Future research and clinical trials are warranted to further refine these non-pharmacologic strategies and enhance our understanding of their efficacy in the complex landscape of chronic refractory cough [10].

References

 Parveen S, Misra R, Sahoo SK (2012) Nanoparticles: a boon to drug delivery, therapeutics, diagnostics and imaging. Nanomed Nanotechnol Biol Med 8(2): 147-166.

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- 2. Mitchell MJ (2021) Engineering precision nanoparticles for drug delivery. Nat Rev Drug Discov 20(2): 101-124.
- 3. Biondi M, Ungaro F, Quaglia F, Netti PA (2008) Controlled drug delivery in tissue engineering. Adv Drug Deliv Rev 60(2): 229-242.
- 4. Karuppusamy C, Venkatesan P (2017) Role of nanoparticles in drug delivery system: a comprehensive review. J Pharm Sci 9(3): 318.
- 5. Rafal B, Sikorski AF (2019) Editorial focus: understanding off-target effects as the key to successful RNAi therapy. Cell Mol Biol Lett 24(1): 1-23.
- Teymourian H, Parrilla M, Sempionatto JR, Montiel NF, Echelpoel RV et al. (2020) Wearable electrochemical sensors for the monitoring and screening of drugs. ACS Sens 5(9): 2679-2700.
- 7. Singh R, James W (2009) Nanoparticle-based targeted drug delivery. Exp. Mol 86(3): 215-223.

- 8. Chen W, Lu Y, Qiu L, Kumar S (2021) Designing personalized treatment plans for breast cancer. ISR 32(3): 932-949.
- 9. Alsaleh FM, Smith FJ (2010) Insulin pumps: from inception to the present and toward the future. J Clin Pharm Ther 35(2): 127-138.
- 10. Zhang R, Qin X, Kong F, Chen P, Pan G (2019) Improving cellular uptake of therapeutic entities through interaction with components of cell membrane. Drug Deliv 26(1): 328-342.

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