

# Evaluation of the Chronic Cough

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4/5/2017



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# The Clinical Problem

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- The most common symptom for which patients seek medical attention
- Chronic if it lasts more than 8 weeks
- Most commonly 5<sup>th</sup> and 6<sup>th</sup> decades of life
- Most patients describe it as dry or productive of minimal amounts of sputum
- Has a wide differential – respiratory, nonrespiratory, a side effect of many drugs



# Four Step Approach

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1. Identification and Treatment of Obvious Causes
2. Focused Testing for and Treatment of Asthma, GERD, Rhinosinusitis
3. Comprehensive Investigation to Exclude Rare Causes
4. Neuromodulatory Treatment for Idiopathic or Refractory Chronic Cough



# 1. Identification and Treatment of Obvious Causes

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- History and Physical
  - ACE Inhibitors
  - Smoking or occupational exposures
  - Red Flags
    - Weight loss
    - Hemoptysis
  - Wheezing
- Chest Radiography
- Spirometry



ILLUSTRATION BY TODD BUCK

## 2. Focused Testing and Treatment of Asthma, GERD, and Rhinosinusitis

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- If CXR and Spirometry are normal, most common etiologies are:
  - Cough variant asthma
    - Methacholine challenge and inhaled glucocorticoids
  - GERD
    - Trial of PPI BID
  - Rhinosinusitis (Upper Airway Cough Syndrome)
    - Postnasal drip → nasal glucocorticoids and antihistamines



# 3. Investigations to Rule Out Rare Causes of Cough

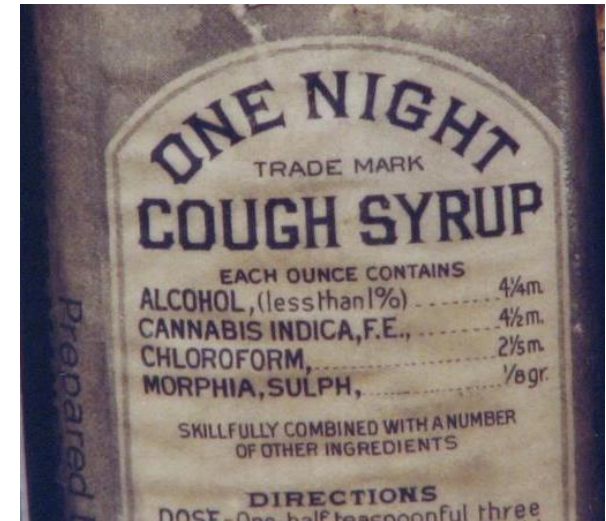
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- If common causes are ruled out, refer to a cough specialty clinic
- High Resolution CT scan of the chest
  - Parenchymal diseases – pulmonary fibrosis, bronchiectasis, sarcoidosis
- Bronchoscopy
  - Tracheobronchomalacia, chronic bronchitis, eosinophilic bronchitis

# 4. Management of Idiopathic or Refractory Chronic Cough

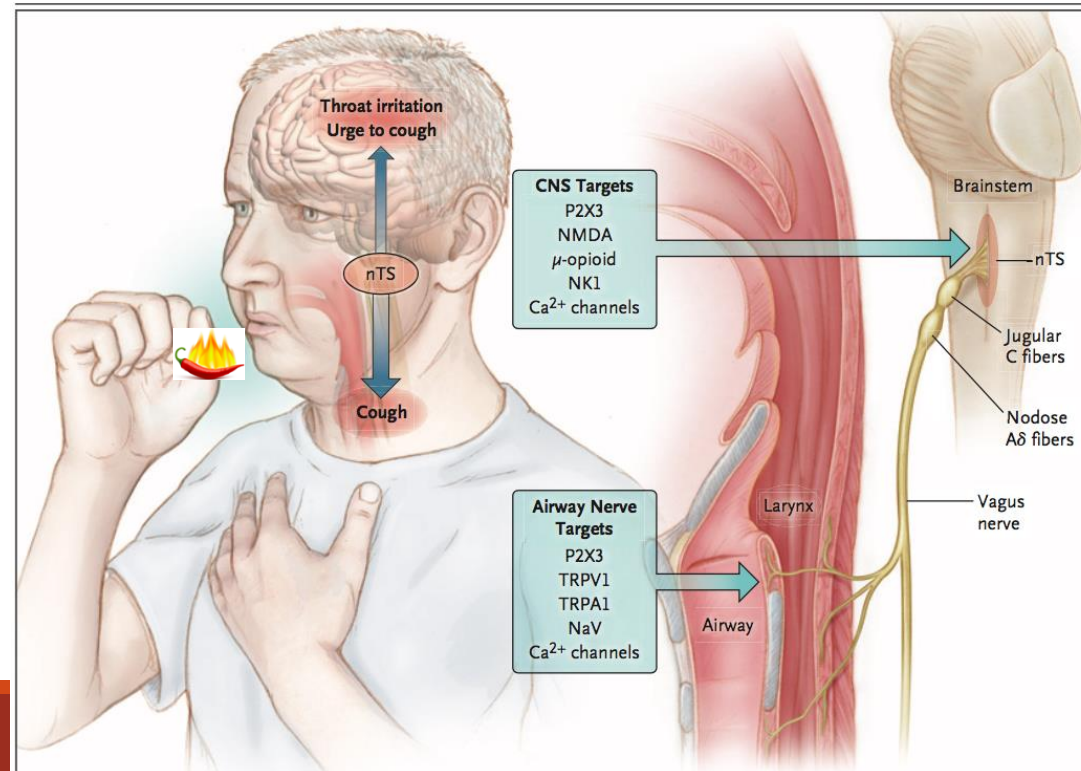
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- Many patients continue to cough chronically despite treatment
- OTC meds – menthol, lozenges, syrups, ?honey
- No FDA approved treatments for refractory or idiopathic cough
  - Morphine
  - Gabapentin
  - Amitriptyline
- Speech pathology treatment



# Areas of Uncertainty

- Many have no response to treatment or have no identifiable cause of the persistent cough
- Cough hypersensitivity syndrome - A neuronal disorder?





# References

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