# **Chronic Cough**

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### Outline

- 1. Definition
- 2. Assessment
- 3. Management of specific cough syndromes
- 4. Summary

#### 1. Definition

- Cough lasting more than 8 weeks
- 10-20% of the adult population...
- 10% of respiratory referrals to secondary care...

#### 2. Assessment

- HISTORY
- Age and sex
- Smoking
- Characteristics of the cough (cough questionnaire helpful)
  - Onset
  - Duration
  - Relation to infection
  - Sputum
  - Diurnal variation
  - Cough triggers/aggravants
  - Food/(posture)
  - Cough on phonation

This questionnaire is designed to assess the impact of cough on various aspects of your life. Read each question carefully and answer by CIRCLING the response that best applies to you. Please answer ALL questions, as honestly as you can. 1. In the last 2 weeks, have you had chest or stomach pains as a result of your cough? 2. In the last 2 weeks, have you been bothered by sputum (phlegm) production when you cough? 3. In the last 2 weeks, have you been fired because of your cough? 4. In the last 2 weeks, have you felt in control of your cough? 5. How often during the last 2 weeks have you felt embarrassed by your coughing? 6. In the last 2 weeks, my cough has made me feel anxious 7. In the last 2 weeks, my cough has interfered with my job, or other daily tasks 8. In the last 2 weeks, I felt that my cough interfered with the overall enjoyment of my life 9. In the last 2 weeks, exposure to paints or fumes has made me cough A good bit of the time 10. In the last 2 weeks, has your cough disturbed your sleep? A good bit of the time A little of the time 11. In the last 2 weeks, how many times a day have you had coughing bouts? 1. All of the time 2 Most times during the day 12. In the last 2 weeks, my cough has made me feel frustrated 13. In the last 2 weeks, my cough has made me feel fed up 14. In the last 2 weeks, have you suffered from a hoarse voice as a result of your cough? 15. In the last 2 weeks, have you had a lot of energy? 16. In the last 2 weeks, have you warried that your cough may indicate serious illness? 17. In the last 2 weeks, have you been concerned that other people think something is wrong with you, because of your cough? 18. In the last 2 weeks, my cough has interrupted conversation or telephone calls 19. In the last 2 weeks, I feel that my cough has annoyed my partner, family or friends 5 Occasionally who Loough Leough Thank you for completing this questionnaire.

Birring S S et al. Thorax 2003;58:339-343



- Medication
- Occupation/hobbies
- PMH
  - Asthma
  - COPD
  - Bronchiectasis
  - Lung cancer
  - Pertussis
  - Atopic disease
  - CVD

- <u>INVESTIGATIONS</u>- Primary Care
- CXR
- SPIROMETRY
- <u>INVESTIGATIONS</u>- Secondary Care
- Bronchoscopy
- HRCT

# 3. Management Of Specific Cough Syndromes

- Cough Variant Asthma (30%)
  - An isolated cough without objective evidence of asthma (ie variable airflow obstruction and eosinophilic inflammation)
  - Clinical indicators-nocturnal, exercise, allergens...
  - If spiro normal- bronchial provocation testing (bronchodilator reversibility and PEF diaries less helpful...
  - Steroid trial (pred 30mg for 2/52) not specific...
  - Manage according to asthma guidelines
  - Role of leukotriene receptor antagonists?

- GORD (5-40%)
  - Increased cough reflex sensitivity/vagally mediated reflex stimulated by acid or non acid oesophageal reflux
  - Self perpetuating cough-reflux cycle...
  - May occur in the absence of gastrointestinal symptoms
  - Treatment- ppi bd before meals for >8/52
  - Oesophageal manometry if diagnosis remains uncertain
  - Consider adding ranitidine
  - Prokinetics
  - Stop medication that may worsen reflux (nitrates, Ca channel blockers, bisphonates, theophylline)
  - Antireflux surgery- only after everything else tried and in selected cases only...

- Upper Airway Disease (>50%)
  - Cough associated with nasal stuffiness, sinusitis or post nasal drip.
  - Proven association of upper airway disease and cough but association with the individual symptoms and cough can be poor...
  - Trial of treatment with referral for inspection of upper airways if response is poor
  - Antihistamines first line, then nasal steroid >1/12 trial

## Summary

- Algorithims have an important role in the systematic diagnosis and management of chronic cough alongside detailed history taking
- Don't forget occupation...
- Questionnaires can be very useful
- CXR and spirometry mandatory
- Bronchial provocation testing if spiro normal (and cause uncertain)
- Bronchoscopy if FB suspected
- Management comprises a combination of diagnostic tests and trials of treatment (be sure therefore to only treat one cause at a time...)