10-minute consultation

Chronic cough

Graeme P Currie, Robert D Gray, John McKay

A 42 year old woman presents with an eight month history of non-productive chronic cough. Her general health is good other than hypertension. She finds social situations embarrassing and is fed up as the cough causes urinary incontinence and disrupts her sleep.

What issues you should cover

- Chronic cough has been defined as lasting more than two months.
- Take a history to elucidate the cause of the cough. In particular, ask about symptoms of asthma (including any occupational association) and symptoms of postnasal drip, such as repeated throat clearing, nasal discharge, or excessive production of phlegm. Ask specifically about heartburn and regurgitation.
- Does the patient smoke?
- Has the patient been prescribed an angiotensin converting enzyme inhibitor?
- Look out for worrying features associated with the cough that merit specialist referral (box).
- Chronic cough can cause exhaustion and irritability, headaches, difficulty sleeping, urinary incontinence, syncopal episodes, sore throat, self consciousness, and fear of underlying serious illness.
- Psychogenic cough and habit cough are diagnoses of exclusion, and in most cases a cause can be found.
- Explain that to make a diagnosis several consultations may be needed.

What you should do

- Examine the patient, with particular attention to the upper and lower respiratory tracts. Look for signs of asthma and postnasal drip with its possible causes (allergic rhinitis, non-allergic rhinitis, and sinusitis). Remember that examination often shows nothing abnormal.
- Diurnal peak flow monitoring for two to three weeks may help to clarify a diagnosis of asthma, and spirometry can determine if there is airflow obstruction. Normal spirometry is useful in excluding chronic obstructive pulmonary disease.
- Arrange chest radiography in smokers and in those at risk of tuberculosis or immunosuppression—also in non-smokers if the diagnosis is not clear.
- A skin prick or radioallergosorbent test to common aeroallergens may be helpful to determine if postnasal drip has an allergic aetiology.
- If the patient smokes, the cough may be due to physical irritation or chronic obstructive pulmonary disease.
- In non-smokers who do not take an angiotensin converting enzyme inhibitor, and whose chest radiograph is essentially normal, the most likely causes of chronic cough are asthma, postnasal drip from the nose or sinuses, or gastro-oesophageal reflux disease.
- Less common causes include bronchiectasis, sarcoidosis, bronchial carcinoma, left ventricular failure, tuberculosis, eosinophilic bronchitis, interstitial lung disease, and chronic aspiration.

Patients with chronic cough

Reasons for specialist referral

- Weight loss
- Haemoptysis
- Purulent sputum
- Night sweats
- Risk factors of immunosuppression
- Difficult symptom control
- Uncertain aetiology

Management

Asthma and chronic obstructive pulmonary disease

- Follow British Thoracic Society guidelines

Postnasal drip syndrome

- Perennial or seasonal allergic rhinitis: advise allergen avoidance and prescribe nasal corticosteroid spray or oral antihistamine
- Non-allergic rhinitis: consider ipratropium nasal spray
- Sinusitis: consider antibiotics
- Nasal decongestants—for short term use only—can also be useful in postnasal drip when combined with other treatments

Gastro-oesophageal reflux disease

- Advise lifestyle changes, take conservative measures, and prescribe acid suppression drugs

- The value of anti-tussive drugs for short term relief of symptoms is debatable. Opioids should generally be avoided in view of their addictive nature.
- Where necessary, encourage smoking cessation.
- Angiotensin converting enzyme inhibitors cause a non-productive cough in 5-10% of cases, which is not dose dependent. If this is the cause, the cough should settle within a month of discontinuing the drug. An alternative agent, such as an angiotensin II receptor antagonist, should be considered.
- Ask the patient to make another appointment to assess response. This will also provide an opportunity to discuss the diagnosis and management if initial treatment fails.

This is part of a series of occasional articles on common problems in primary care

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Useful reading

Irwin RS, Madison JM. The diagnosis and treatment of cough. *N Engl J Med* 2000;343:1715-21.

Schroeder K, Fahey T. Over-the-counter medications for acute cough in children and adults in ambulatory settings. *Cochrane Database Syst Rev* 2001;(3):CD001831.

The British Guidelines on Asthma Management 1995 Review and Position Statement. *Thorax* 1997;52(suppl 1):10-20.