

Chronic Cough

Cough is a reflex response to airway irritation. It is triggered by stimulation of airway cough receptors either by irritants or by conditions that cause airway distortion

Chronic cough is a cough present for **more than 8 weeks**

Common causes of chronic cough include: airways disease, gastro-oesophageal or laryngeal reflux disease, interstitial lung disease, bronchiectasis, CCF, rhinosinusitis and lung cancer

Patients meeting the criteria for a 2 week wait referral for lung cancer should not be assessed and managed using this protocol.

History

- Features of cough e.g. dry vs productive, diurnal variation
- Associated features: breathlessness, chest pain, haemoptysis, night sweats and weight loss
- Symptoms suggestive of acid reflux (heartburn, water brash, positional cough or symptoms, hoarseness, loss of voice – note can be silent reflux)
- Symptoms suggestive of rhinosinusitis (nasal congestion/blockage, nasal discharge, post nasal drip, facia pain, change in sense of smell)
- Medication history for ACEi
- Smoking history
- Occupational history

Examination

- Vital signs: pulse, RR, SpO₂, temperature
- BMI
- Peripheral stigmata of lung disease: clubbing, cyanosis, lymphadenopathy
- Chest auscultation
- Nasal examination for nasal polyps or congestion

Investigations

- CXR
- Post-bronchodilator spirometry
- FBC (for eosinophilia), U&E (in case of need for CT with contrast at later stage)

Treatment – General Principles

All current smokers with chronic cough should be advised regarding smoking cessation and referral for support offered

All patients on ACEi should have this changed to an alternative (for most people the cough resolves within a month but the cough may persist for several months)

Patients with obstructive post-bronchodilator spirometry should be assessed for obstructive airways disease and treated as per the relevant guidelines. In the absence of reduction of spirometry services due to COVID-19 infection we would recommend measuring of serial peak flows and trials of treatment pending spirometry. Spirometry should be done at the earliest opportunity once available.

The three most common causes of chronic cough without evidence of obstructive spirometry are:

- Asthma/eosinophilic bronchitis
- Gastro-oesophageal/laryngeal reflux
- Rhinosinusitis

Patients should be treated for the above conditions as per the following guidance starting at the most likely diagnosis based on the clinic history.

Patients without a clear diagnosis should be commenced on treatment in a sequential manner

Each treatment should be trialled for 2-3 months

Patient with multiple possible diagnoses should be trialled on treatment in a sequential manner with additional treatments added in if only partial effect is seen after a 2-3 month period

Gastro-Oesophageal Reflux Disease

- Reflux can occur without any symptoms
- Gastro-oesophageal symptoms as well as cough include heartburn, water brash, cough associated with food intake, cough on stopping forwards or lying down
- Laryngo-pharyngeal reflux symptoms as well as cough include hoarseness, loss of voice, globus, unusual throat symptoms
- Patients should be offered lifestyle advice as well as pharmacological therapy.
- **Recommended pharmacological therapy would be omeprazole 40mg bd (reduce after 4-6 weeks) +/- Peptac after meals (can be purchased over the counter)**
- **Lifestyle advice includes weight reduction, alcohol avoidance, avoidance of spicy foods and caffeine, low fat diet, smoking cessation advice and head of the bed being propped up.**

Rhinosinusitis

- Rhinosinusitis is inflammation involving the nasal passages, sinuses or both
- Rhinosinusitis can be allergic or non-allergic, seasonal or perennial
- Common symptoms as well as cough include nasal congestion/blockage, nasal discharge, post nasal drip, throat clearing, facial pain and change in sense of smell
- For allergic rhinitis, allergen avoidance should be recommended if possible
- **Recommended pharmacological therapy would include intranasal steroid e.g. Beclometasone nasal spray (50mcg/spray) 2 sprays each nostril twice a day or Mometasone nasal spray (50mcg/spray) 2 sprays each nostril once daily increasing up to 4 sprays in each nostril daily if necessary +/- an antihistamine if possibility of allergic rhinosinusitis**

Cough variant Asthma/ Eosinophilic Bronchitis

- The patient may not have classical features of asthma and cough may be the only symptom
- Spirometry /peak flow measurements may be normal with no evidence of airways obstruction
- FeNO if available, would be raised in eosinophilic bronchitis
- Responds to inhaled corticosteroids
- **Recommended pharmacological treatment would be an ICS at 400mcg BDP equivalent (medium/moderate ICS). Please refer to your CCG's asthma and COPD guidance.**

Referral to Secondary Care

- Patients who meet the 2ww referral criteria should be referred via the 2ww lung cancer pathway
- Patients with suspected bronchiectasis or interstitial lung disease based on radiological findings or clinical assessment should be referred as a routine referral to the respiratory team. Request a CT scan as per the existing CT process for your CCG locality.
- Patients with chronic cough with no evidence of the above should have investigations as listed and follow the treatment protocol in a sequential manner.
- Treatment failure having followed this treatment protocol warrants a referral to secondary care.
- If the information provided when the patient is referred does not suggest appropriate investigations or trials of treatment then the referral may be returned to primary care with advice for investigation and treatment as above.
- There are limited further treatment options which may include low dose opiates, brompheniramine or gabapentin. These treatments should only be considered following secondary care review.
- Brompheniramine prescribing should remain in secondary care.
- A small number of patients may be referred for cough suppression techniques.

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Treatment of chronic intractable cough May 2014	Guidance update with more information on history, examination, investigations, treatment principles