

# Madigan Army Medical Center Referral Guidelines

## Chronic Cough

### Diagnosis/Definition

Cough that is troublesome to the patient, persists more than 3 months, and has failed initial treatment

### Initial Diagnosis and Management

- Evaluation should include history, physical examination, chest x-ray, and routine spirometry.
- If spirometry reveals obstructive ventilatory defect, evaluate for asthma or chronic obstructive pulmonary disease.
- If the patient is a smoker, a diagnosis of chronic bronchitis is likely, and no further evaluation until at least one month of abstinence from smoking.
- If the patient is taking an angiotensin converting enzyme inhibitor, it should be discontinued and the cough should resolve within two weeks.
- If the history (sensation of drip in the back of throat, chronic throat clearing, or rhinitis) or physical exam (mucoïd or mucopurulent secretions in the nares or pharynx, cobblestone appearance of the pharynx) suggests post-nasal drip, the patient should be treated for two months with intranasal steroids +/- a long acting antihistamine/decongestant.
- Patients with post-nasal drip who have symptoms suggestive of sinusitis (fever, frontal headache, purulent secretions, bloody nasal discharge) or who fail the initial 2 month therapy (with persistent symptoms or signs of post-nasal drip) should be treated empirically for sinusitis with antibiotics and decongestant nasal spray as well as intranasal steroids.
- Patients with normal baseline spirometry and no evidence of post-nasal drip or persistent cough despite clearing of post-nasal drip with therapy should be evaluated with a methacholine challenge. If the methacholine challenge is positive, the patient should be treated for cough variant asthma. Treatment considerations could include a low dose inhaled corticosteroid with an albuterol inhaler as required.
- If patients have no evidence of post-nasal drip and a negative methacholine challenge, they should be referred to gastroenterology for 24 hour esophageal pH monitoring. If significant reflux related to cough is found the patient should be started on omeprazole 20 mg BID for at least three to six months.

### Ongoing Management and Objectives

- Patients whose cough improves with specific therapy usually need maintenance therapy.
- Post-nasal drip - nasal steroids
- Cough variant asthma - inhaled steroids
- Reflux induced cough – usually requires a proton pump inhibitor. (Prilosec or Nexium 20 mg po bid taken 30-45 minutes before meals)

## Indications for Specialty Care Referral

- If chest x-ray reveals a new and unexplained abnormality, the patient should be referred to pulmonary for evaluation.
- Patients with post-nasal drip that does not clear with intranasal steroids and empiric therapy for **sinusitis** should have a CT scan of the sinuses. If this suggests chronic sinusitis then the patient should be referred to the Otolaryngology Service.
- Patients with a positive methacholine challenge test and no improvement after two weeks of an inhaled corticosteroid or a week of Prednisone should be referred to Pulmonary Medicine for evaluation.
- Patients with suspected **gastroesophageal reflux** who do not resolve their cough after 3 months of omeprazole should be referred to gastroenterology for evaluation (possibly endoscopy and ph/impedence testing). Further, if they respond to omeprazole, acid suppression might be tapered to maintain on the minimum dose needed to control symptoms. Surgical fundoplication might be an option only in those responsive to therapy but requiring high doses of acid suppression or in those with side effects to medical therapy. Until further data suggests otherwise, surgical fundoplication should not be recommended for patients unresponsive to medical therapy
- Patients with a completely negative workup and persistent cough should be referred to Pulmonary

## Criteria for Return to Primary Care

Completed subspecialty evaluation

Last Review for this Guideline: **December 2010**

Referral Guidelines require review every three years.

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Clinical Practice and Referral Guidelines Administrator