

Chronic Cough

September, 2008

Answer sheet

1. True or false: cough which last for 6-8 wks is consistent with diagnosis of chronic cough.

Answer: False, duration of acute cough is $< \text{ or } = 3$ wks; sub acute cough 3-8 wks and chronic cough > 8 wks.

2. Etiologies of Chronic cough include
 - a) Sinusitis
 - b) Asthma
 - c) Lung abscess
 - d) Laryngitis
 - e) All of the above
 - f) a, b and d

Answer: E

3. Most common cause of chronic cough is?
 - a) Asthma
 - b) Upper airway cough syndrome
 - c) GERD

Answer: B. Upper Airway cough syndrome is the result of post nasal drip, which is the commonest cause of Chr. Cough as suggested by several studies. Underlying reasons for postnasal drip include allergic, perennial and vasomotor rhinitis; acute nasopharyngitis and sinusitis.

4. 29 yr old women who has past medical history of sickle cell dz and childhood asthma(now controlled), presents to the office for a follow up visit . Pt was seen 3 months ago for intermittently productive cough of clear phlegm and night time heart burn. She was prescribed OTC antitussive and PPI. Today, pt states that her Heartburn has improved quite a bit, however cough still bothers her on and off, denies having symptoms suggestive of Asthma exacerbation. Exam is normal. Pt looks frustrated and requests a specialist referral. What will u do next?

Answer: Diagnose her as Cough variant Asthma and prescribe inhalers for asthma eacerbation. Although pt in the question does not have wheezing, which is the most frequent symptom in asthma exacerbation, a subset of pt will not have classic signs and sx. chronic cough can be a

clue to diagnose Cough variant asthma. Left untreated, it can progress to include wheezing and dyspnea.

5. True or false: In pt with persistent cough, the presence of reversible airflow obstruction or a positive bronchoprovocation test does not necessarily prove that the cough is secondary to Asthma.

Answer: True.

Above tests could be false positive. One study, which evaluated the utility of spirometry in predicting that asthma was responsible for cough, showed a 33% false positive rate. Thus, the best way to confirm asthma as a cause of cough is to demonstrate improvement in the cough with appropriate therapy for asthma (use of inhaled beta agonist).

6. Highlight the major differences in between gastroesophageal reflux and laryngopharyngeal reflux (LPR, as the cause of chronic cough)?

Answer: Gastroesophageal reflux is a problem of lower esophageal sphincter and mainly occurs in recumbent position, however, LPR is seen as primarily an upper esophageal sphincter problem that mainly occurs in the upright position during periods of physical exertion eg, bending over, exercise, valsalva etc.

7. Select the best answer

Bronchogenic Carcinoma should be top differential diagnosis for chronic cough in current or former smokers with:

- a) A new cough or a recent change in chronic smokers cough.
- b) Hemoptysis that does not occur in setting of airway infection
- c) A cough that persists more than one month following smoking cessation.
- d) All of the above
- e) A + C

Answer: D, all the three statements are correct. Screen such pt with a PA/Lat CXR.

8. Best initial treatment for Upper airway cough syndrome is?

- a) Antihistamine-decongestant combo using older sedating H1 blockers
- b) Antihistamine-decongestant combo using non-sedating H1 blockers
- c) Ipratropium nasal spray

d) Nasal corticosteroids

Answer: A. American College of Chest Physicians guidelines recommend that older antihistamines be used preferentially in the treatment of cough resulting from post nasal drip. Effectiveness of this form of therapy can usually be observed within one wk. If first line treatment fails, use either Ipratropium nasal spray or nasal corticosteroids such as Beclomethasone, flunisolide, fluticasone. However, steroids take up to 2 wks for their full effect and are often prescribed for 3 months if patient responds to them.