

→ Cough is common, often causes unnecessary anxiety
 → Cough interferes with sleep, work, school, social life!
 → Any vagal afferent can carry signals to the brainstem to trigger coughing.

Chronic Cough (>8 weeks)

→ Do CXR if cough >3 weeks
 → if self-limiting, no investigation needed.

Normal CXR

→ Do spirometry

PFTs: Obstructive (FEV1/FVC < 0.7)

COPD

(controlled)
 → Hx of chronic smoking
 → Progressive Dyspnea
 → Usually productive cough

Asthma

(controlled)
 → Hx of allergy + bronchial hyper-sensitivity
 → Episodic dyspnea + wheeze
 → Usually dry cough

PFTs: Normal

Smoker's Cough

→ Smoking Hx

Upper Airway

→ Rhinitis
 → Post-nasal drip
 → Sinusitis (Tx w/ nasal corticosteroid or saline rinse)

Drugs
 → ACE inhibitors (5% get chronic cough)

Asthma/bronchospasm

→ (on remission)
 → Positive methacholine challenge
 → Eosinophils on induced sputum test
 → Common asthma triggers present

GERD

→ Sternal pain
 → Regurgitation
 → 1st line Tx: PPIs

Abnormal CXR

Lung Cancer

→ Unilateral masses in lung
 → May have hemoptysis

Chronic infection

→ TB
 → Fungal

Interstitial Lung disease

CHF

→ Mild: Upper-zone bat-wing distribution: *vascular redistribution*
 → Moderate: *Kerley B lines* (inter-lobular edema, between lobes in pleural space)
 → Severe: Pulmonary edema, atelectasis of alveoli → *peri-bronchial cuffing* (donut sign) & *air-bronchograms*
 → *Cardiomegaly*
 → *Pleural effusion* (costo-phrenic angles blurred)

COPD (bad)

→ hyperinflation: flat diaphragm, reduced vessel markings

Red Flags:

- Fever, night sweats, chills (infection)
- Weight loss, fatigue (↓ sleep, or serious underlying dx, i.e. cancer)
- Dyspnea (underlying lung disease or CHF)
- Hemoptysis (blood in cough)
- Abnormal physical findings (i.e. lymphadenopathy, clubbing, chest exam, etc)
- Abnormal CXR: refer + order CT, bronchoscopy to complete investigation
- History of cancer, lung disease

Complications of chronic cough:

- Headaches
- Muscle strain, rib fractures
- ↑ intrathoracic pressure → Vomiting, Syncope (↓ venous return, hypotension)
- ↑ intrathoracic pressure → hernias, stress incontinence