COUGH

Did the cough begin with an upper respiratory tract infection?

The most common cause for a cough is a viral upper respiratory tract infection. This can occur with or without reactive airways disease/asthma. Without other significant generalized signs of illness or respiratory distress, often no significant initial evaluation or therapy is necessary. Many young children will have frequent (6–8) viral infections per year accompanied by a cough, giving the appearance of chronic cough.

Is there any any fast breathing or breathing difficulty?

Fast breathing and or chest indrawing may indicate pneumonia. A child with recurrent breathing difficulty may be an asthmatic. A congenital heart disease should be considered in any serious respiratory illness,as it could be masked by respiratory symptoms

What are the aetiological clues associated with cough and breathlessness?

Staphylococcal pneumonia is suspected if(☹imnci)

(a) there is a rapid progression of the disease, or

(b) there is pneumatocoele, or pneumothorax, or effusion on chest X-ray, or

(c) child has large skin boils or abscess or infected scabies, or

(d) post-measles pneumonia which is not responding within 48 hours to the initial therapy

In young infants, Conjunctivitis and pneumonitis in a young infant may suggest infection due to Chlamydia trachomatis.

Are there environmental stimuli that may irritate the airway?

Passive smoke in infants and young children and active smoking in adolescents can trigger a chronic cough.pets,hosehold smoke,firewood,mosquitocoils,agarbathies

How is the cough related to time of day and to daily activities?

A cough which is most prominent during or after eating is suggestive of aspiration or

gastroesophageal reflux. If exposure to cold air and exercise precipitates the cough, reactive airway

disease should be considered. Seasonal coughing suggests an allergic component. Similarly, a nighttime cough may indicate postnasal drip secondary to either allergies or sinusitis.

Does the cough resolve with sleep?

Coughs which disappear when the patient is asleep or appear only when an adult is present may suggest a psychogenic cough.

Is there a history of a choking episode?

Often, a significant choking episode occurs at the time of foreign body ingestion. For this reason, a thorough history is essential. Foreign body aspiration is most common in toddlers; however, older siblings can often place inappropriate objects in the mouth of infants. If foreign body aspiration is suspected, one should obtain either lateral decubitus or inspiratory and expiratory chest roentgenograms.

Is there a history of recurrent pneumonias or other infections?

Recurrent infections should cause one to consider immune dysfunction such as HIV and congenital immunodeficiencies. Recurrent pneumonias associated with sinusitis, multiple otitis medias, bronchiectasis, and situs inversus, suggest primary ciliary dyskinesia.

How is the growth?

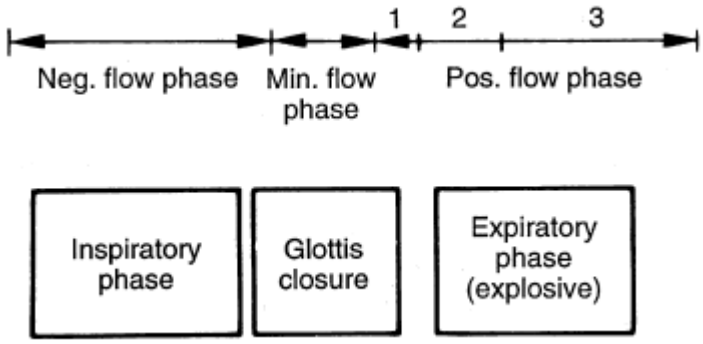
Cough >2 wks with weight loss suspect tb,cf,tb. FAILURE TO THRIVE STATORRHEA- CF

Is there any history of hemoptysis?

Hemoptysis can be seen with a viral or bacterial pneumonia. However, it is also present in many other conditions, including fungal disease, autoimmune diseases, granulomatous disorders, cystic fibrosis, congenital heart disease, tuberculosis, and pulmonary hemosiderosis most common cause of cough is infection, allergy and irritants

what is cough?

The cough reflex serves to prevent the entry of harmful substances



into the tracheobronchial tree and to expel excess secretions and retained material from the tracheobronchial tree.

Cough begins with stimulation of cough receptors, located in the upper and lower airways,and in many other sites such as the ear canal, tympanic membrane,sinuses, nose, pericardium, pleura, and diaphragm. Receptors send messages via vagal, phrenic, glossopharyngeal, or trigeminal nerves to the "cough center," which is in the medulla. Because cough is not only an involuntary reflex activity but also one that can be initiated or suppressed voluntarily, "higher centers" must also be involved inthe afferent limb of the responsible pathway.

What are the clinical clues to cough?

CLINICAL CLUES ABOUT COUGH

CHARACTERISTIC	THINK OF
Staccato, paroxysmal	Pertussis, cystic fibrosis, foreign body, *Chlamydia* spp., *Mycoplasma* spp.
Followed by "whoop"	Pertussis
All day, never during sleep	Habit (tic) cough
Barking, brassy	Croup, psychogenic, tracheomalacia, tracheitis, epiglottitis
Hoarseness	Laryngeal involvement (croup, recurrent laryngeal nerve involvement)
Abrupt onset	Foreign body, pulmonary embolism
Follows exercise	Reactive airways disease
Accompanies eating, drinking	Aspiration, gastroesophageal reflux, tracheoesophageal fistula

CHARACTERISTIC	THINK OF
Throat clearing	Postnasal drip, vocal tic
Productive (sputum)	Infection
Night cough	Sinusitis, reactive airways disease
Seasonal	Allergic rhinitis, reactive airways disease
Immunosuppressed patient	Bacterial pneumonia, *Pneumocystis jiroveci, Mycobacterium tuberculosis, Mycobacterium avium-intracellulare,* cytomegalovirus
Dyspnea	Hypoxia, hypercarbia
Animal exposure	*Chlamydia psittaci* (birds), *Yersinia pestis* (rodents), *Francisella tularensis* (rabbits), Q fever (sheep, cattle), hantavirus (rodents), histoplasmosis (pigeons)
Geographic	Histoplasmosis (Mississippi, Missouri, Ohio River Valley), coccidioidomycosis (southwest), blastomycosis (north and midwest)
Workdays with clearing on days off	Occupational exposure

WHAT ARE THE CHARACTERISTICS OF COUGH AND OTHER CLINICAL FEATURES AND POSSIBLE CAUSES?

SYMPTOMS AND SIGNS	POSSIBLE UNDERLYING ETIOLOGY*
Auscultatory findings (wheeze, crepitations/crackles, differential breath sounds)	Asthma, bronchitis, congenital lung disease, foreign body aspiration, airway abnormality
Cough characteristics (e.g., cough with choking, cough quality, cough starting from birth)	See text; congenital lung abnormalities
Cardiac abnormalities (including murmurs)	Any cardiac illness
Chest pain	Asthma, functional, pleuritis
Chest wall deformity	Any chronic lung disease
Daily moist or productive cough	Chronic bronchitis, suppurative lung disease
Digital clubbing	Suppurative lung disease
Dyspnea (exertional or at rest)	Compromised lung function of any chronic lung or cardiac disease

SYMPTOMS AND SIGNS	POSSIBLE UNDERLYING ETIOLOGY*
Failure to thrive	Compromised lung function, immunodeficiency, cystic fibrosis
Feeding difficulties (including choking and vomiting)	Compromised lung function, primary aspiration
Hemoptysis	Bronchitis
Immune deficiency	Atypical and typical respiratory infections
Medications or drugs	Angiotensin-converting enzyme (ACE) inhibitors, puffers, illicit drug use
Neurodevelopmental abnormality	Primary or secondary aspiration
Recurrent pneumonia	Immunodeficiency, congenital lung problem, airway abnormality
Symptoms of upper respiratory tract infection	Can coexist or be a trigger for an underlying problem