

# Symptomatology in pulmonology



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# Most common signs & symptoms of respiratory tract diseases

- cough
- adventitious breathing sounds
- dyspnoe
- haemoptysis
- chest pain

COUGH

# Cough

- Defensive reflex
- It's job – clear the airways from, mucus, foreign bodies etc.
- Cough receptors – posterior wall of the throat, larynx, tracheal and bronchial wall.
- Symptom, not an illness!



# Cough classification

By duration

- British Thoracic Society:
  - **acute** (less than 3 weeks)
  - **subacute** (3–8 weeks)
  - **chronic** (more than 8 weeks)
- Australian and American College Chest Physicians
  - acute (less than 4 weeks)
  - chronic (more than 4 weeks)

# Cough classification

- **recurrent** (lasting 7-14 days, non-related with infection, appearing a least 2/year)
- **post-infectious cough** (related to infection, lasting 3-8 weeks)

# Cough classification

By cough type

- dry
- productive
- barky
- with dyspnea and/or stridor

# Acute cough - causes

- **Infections of respiratory tract**
  - *rhinovirus, adenovirus, coronavirus, influenza and parainfluenza virus, RS virus*
  - *bacteria (Str. pneumoniae, H. influenzae, M. and Chl.pneumoniae)*
  - *Less common causes – i.e. B.pertussis*



# Acute cough – other causes

- foreign body aspiration
- pneumothorax
- allergic reaction

# Subacute cough

- Post-nasal drip syndrome
- Enlarged adenoid tissue
- Recurrent URT infections

# Chronic cough

- Infection
  - Recurring URT infections
  - Bacterial infection
  - TB
- Asthma (dry, not related to infection, co-presented with dyspnea, seasonal symptoms, normal chest x-ray, wheezes on auscultation)
- GER/GERD

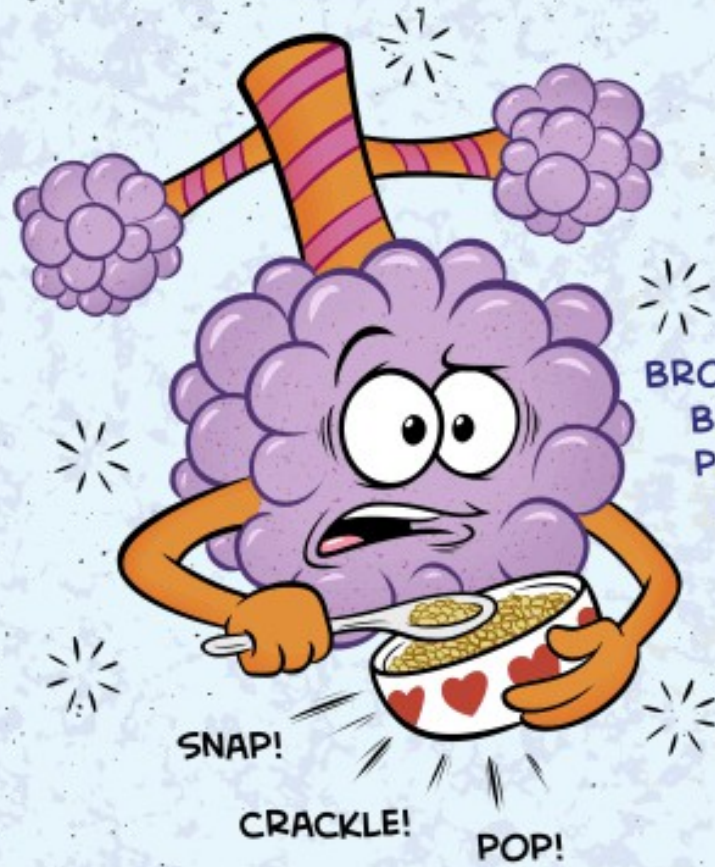
# Chronic cough

- CF
- PCD
- ILD
- malignant lesion
- cardiovascular disorders

# ADVENTITIOUS BREATHING SOUNDS

# ADVENTITIOUS BREATH SOUNDS

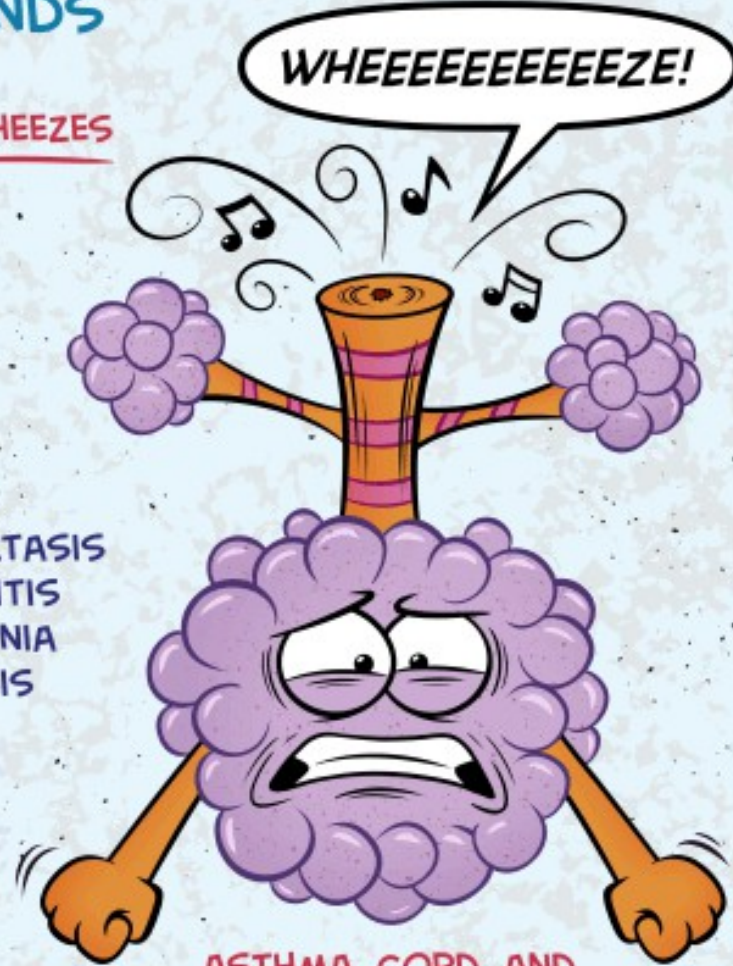
## CRACKLES (RALES)



BRONCHIECTASIS  
BRONCHITIS  
PNEUMONIA  
FIBROSIS  
CHF

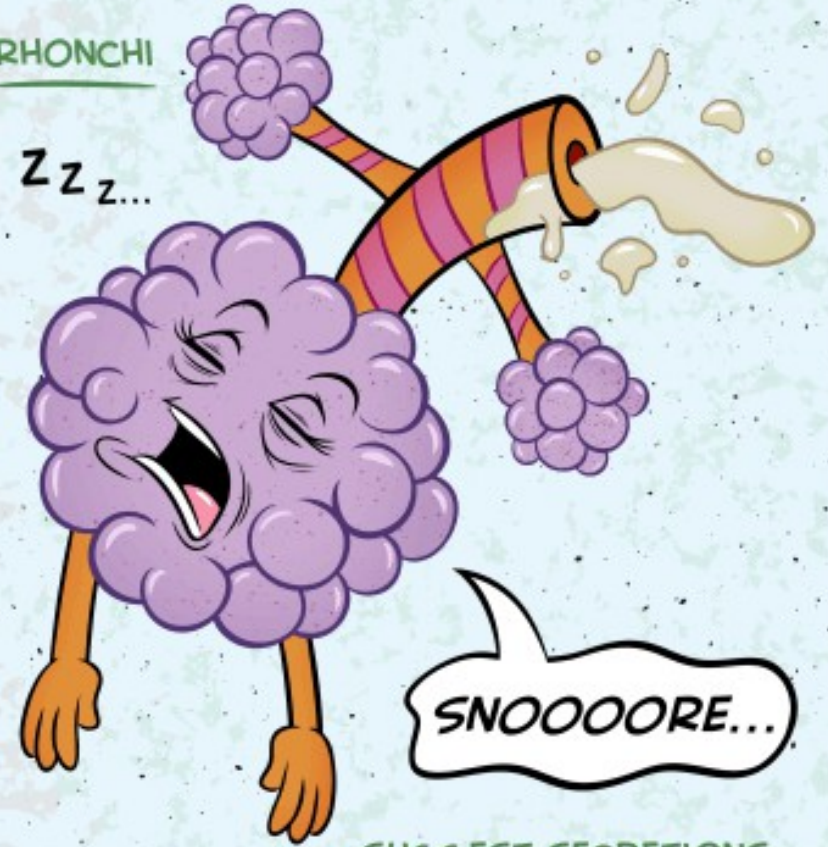
CRACKLE! POP!

## WHEEZES



ASTHMA, COPD, AND  
OTHER CAUSES OF AIRWAY OBSTRUCTION

## RHONCHI



SUGGEST SECRETIONS  
IN THE LARGE AIRWAYS

..... DISCONTINUOUS .....

————— CONTINUOUS —————

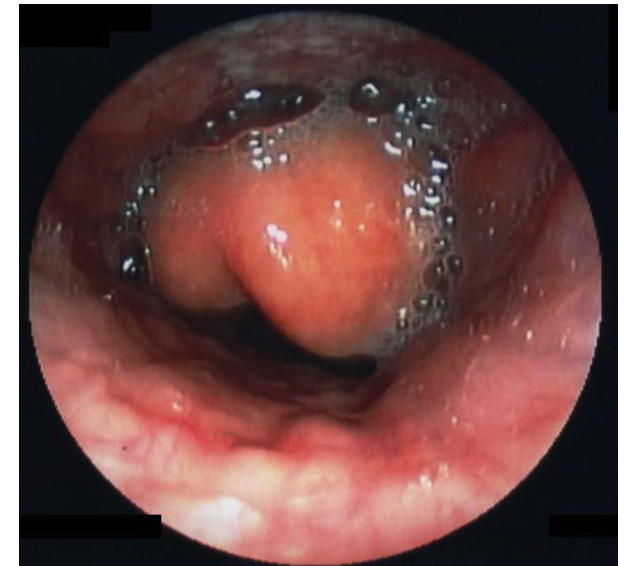
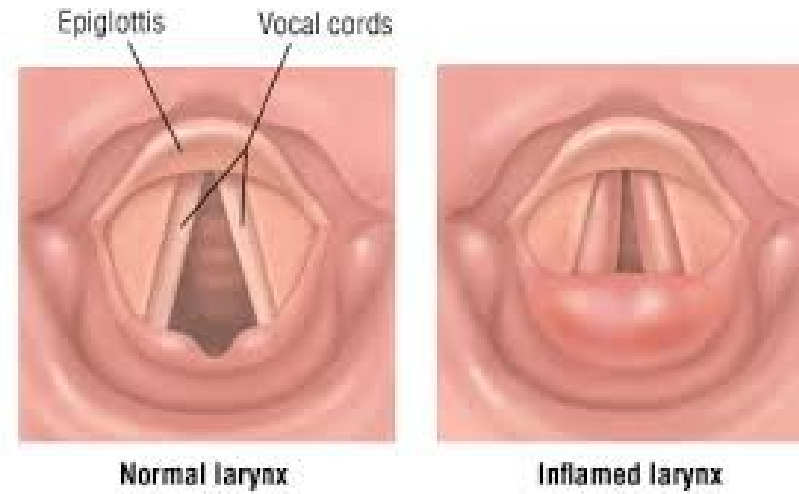
# Types of wheezes

- **Stridor** – on inspiration– problem in the upper airways
- **Wheezes** – on expiration – narrowing of the bronchi.
- **Sometimes both are present!**



# Stridor - causes

- Viral infection – croup
- Bacterial – epiglottitis





DYS-PNOE

# Dyspnoe

subjective vs. objective

newborn and infant:

- accessory breathing muscles involvement,
- grunting,
- tachypnoe,
- difficulties feeding,
- cyanosis

# Dyspnoe

older children:

- tachypne
- ortopnoe
- accessory breathing muscles involvment
- difficulties speaking (speaks in words instead of full sentences)
- tachycardia
- cyanosis

# Dyspnoe - classification

- on inspiration
  - Typically upper respiratory tract, co-existing with stridor
- on expiration
  - Typically lower respiratory tract, co-existing with wheezes
- can be on both

# acute dyspnoe - causes

- asthma
- pneumothorax
- anafilactic shock
- trauma
- heart failure
- foreign body aspiration

# Chronic dyspnoea - causes

- chronic lung diseases
- cardiovascular diseases
- pressure from abdominal cavity
- chest wall deformations
- anaemia
- neuromuscular disorders

HAEMOPTYSIS

# Haemoptysis

- true haemoptysis– source in respiratory tract
- supposed – source not in respiratory tract



CHEST PAIN

# Chest pain in children and adolescent

- Usually non-heart related
- Most common causes:
  - Muscles (chest wall)
  - Co-existing with RTI's (excessive cough) or GTI's (excessive vomiting)
- For differential diagnosis:
  - Chest X-ray
  - ECG

# Chest pain – causes in respiratory tract

- tracheitis, bronchitis, pneumonia, pulmonary effusion
- pneumothorax
- pulmonary embolism
- asthma exacerbation
- foreign body aspiration

Q&A