# COPD clinical case

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# Personal history

- Ahmed salem male pt ,70 years old is a backer,from Egypt,married has 4 offspring the youngest is 25 years old .

# C I O

- Cough ,Shortness of breath, wheezes and expectoration 5 days ago

# Present history

- The condition started 20 years ago by paroxasmal attacks of **cough,dyspnea (grade 2 mMRC)** and **wheeze** of gradual onset and progressive course
- Attacks precipitated by dust exposure and exertion and relieved by medications and rest

- 10 years later ,pt developed **productive cough** with small,whititsh ,mucoid,odourless sputum
- Which increased in the morning
- There was many attacks of **fever,fatigue and yellow expectoration** which improved by antibiotics
- His **dyspnea** was progressive increased till became grade 4 mMRC without orthopnia or PND

- Now pt has **wheeze** even between attacks
- The pt sought medical advice ,investigated by chest x ray , CT chest ,PFT,sputum analysis and culure
- He was treated by inhalers and mucolytes
- He advised to stope smoking

- No chest pain
- No Hemoptysis
- No Pressure manifestations
- No symptoms of other system affection

# Past and drug history

- No history of T.B
- No history of operations
- No history of drugs intake except bronchodilators and mucolytics
- No history of drug allergy

# Social & Family history

No family history of similar disease
No family history of TB or asthma
Smoking history : active smoker (pack year 30)
Occupational history : he was baker

# General examination

- Pt is fully conscious , oriented for time ,place and person , co-operative, average inteligance , average mood and memory

- **Vital signs**

| | |
|---|---|
| Temperature | 37 |
| BL. pressure | 120 l 90 |
| Pulse | 70 l min |
| RR | 16 l min |

# General examination

- Pt looks dyspnic but No cyanosis
- No pallor ,No jaundice
- Puffiness of eye lid
- No working ala nasi or pursing lips
- Neck vein pulsating non congested
- **UL** No flapping tremors ,No clubbing but there is fine tremors
- **LL** No oedema or clubbing

# Local examination

## Inspection

- bilateral  equal movement

- barrel shaped chest.

-Central trachea ,No trails sign

-Low, flat diaphragm causing costal margin retraction on inspiration (Hoover sign)

-No skin abnormality

-Epigastric pulsation

# Normal Chest vs. Barrel-Shaped Chest

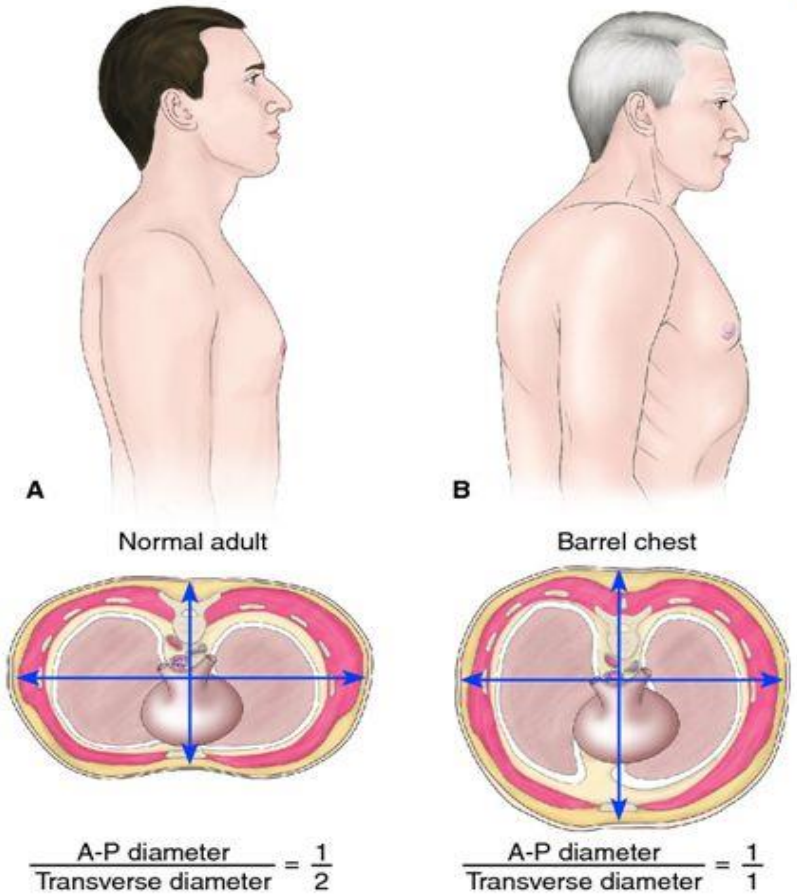
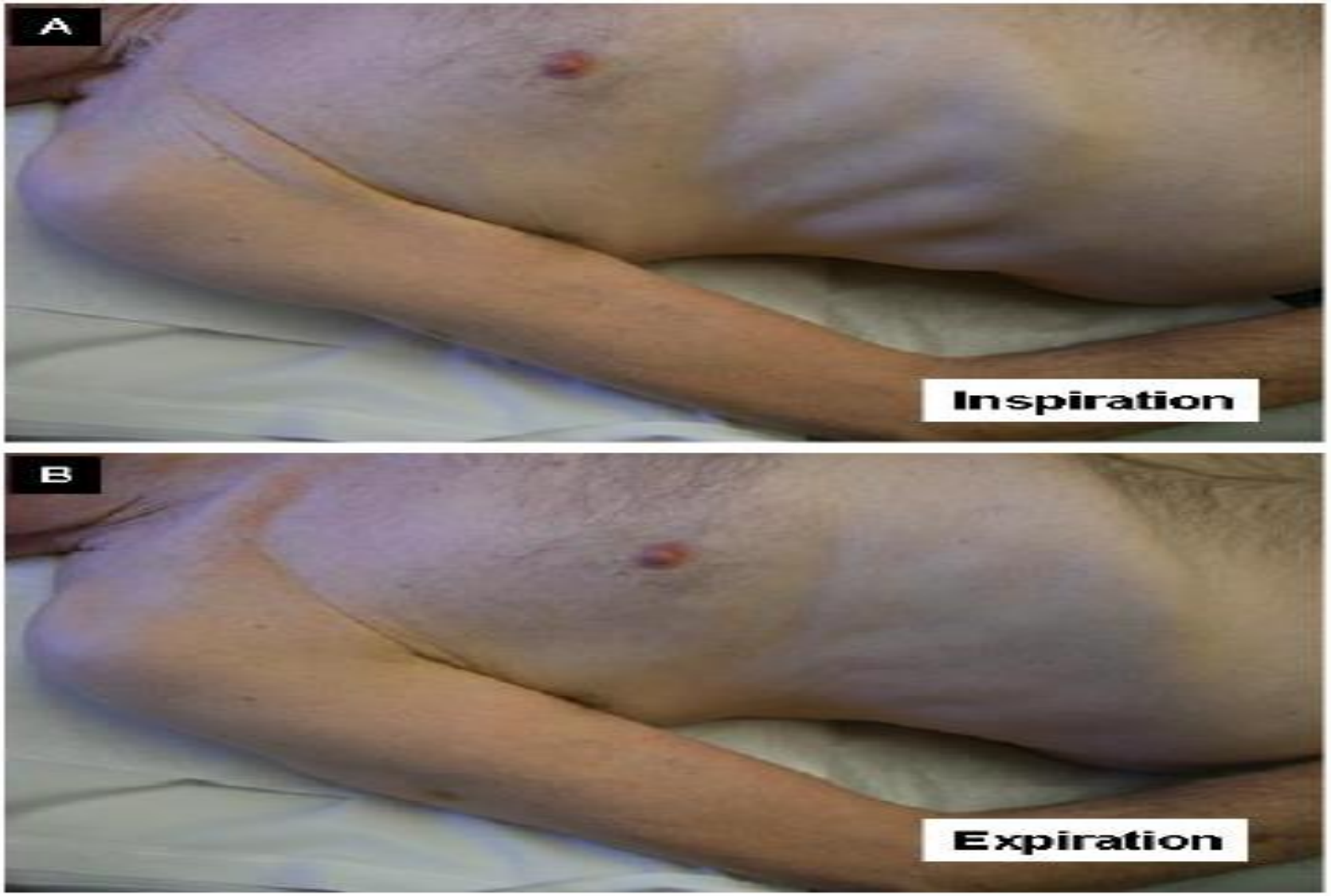



Figure 24-3

# Littens' sign



# palpation

- Central trachea ,decrease tracheal length
- No tracheal tug
- Bilateral limitation of chest expansion
- TVF  equal on both sides
- Palpable rhonchi
- Palpable liver due to

  Depression  by flat diaphragm(not  tender)

# Tracheal position

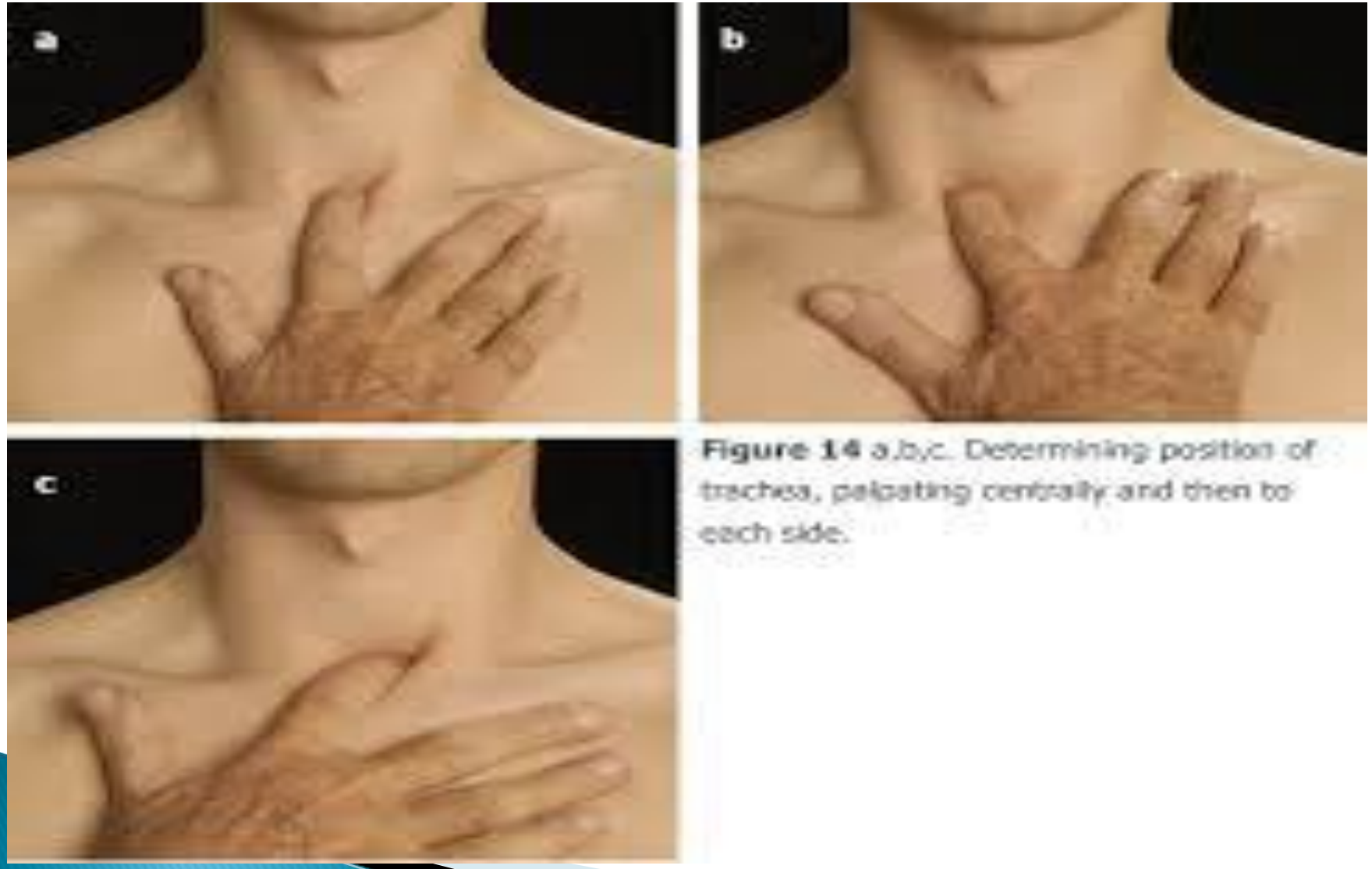



**Figure 14** a,b,c. Determining position of trachea, palpating centrally and then to each side.

# Limitted chest expansion

## 4-Chest expansion

- Place your hands on the patient's chest, inferior to the nipples
- Wrap your fingers around either side of the chest
- Bring your thumbs together in the midline, so that they touch
- Ask patient to take a deep breath
- Observe movement of your thumbs, they should move apart equally
- If one of your thumbs moves less, this suggests reduced expansion on that side

Abnormal Chest expansion:
Less than 2 cm

Reduced expansion can be caused by lung collapse / pneumonia

# Respiratory Examination

## Chest Expansion

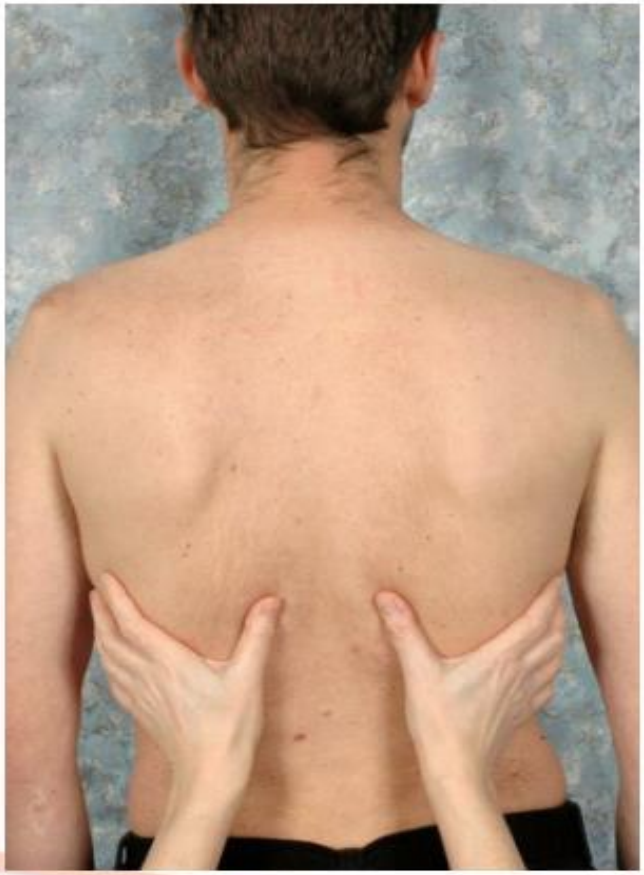
it is important when examining the chest to check for symmetry when the patient is breathing.

To do this place your hands at the level of the 10th rib as shown in the photograph.

Ask the patient to breath in deeply, watch your thumbs move apart, this should be equal.

Also feel the rib cage expand and contract.

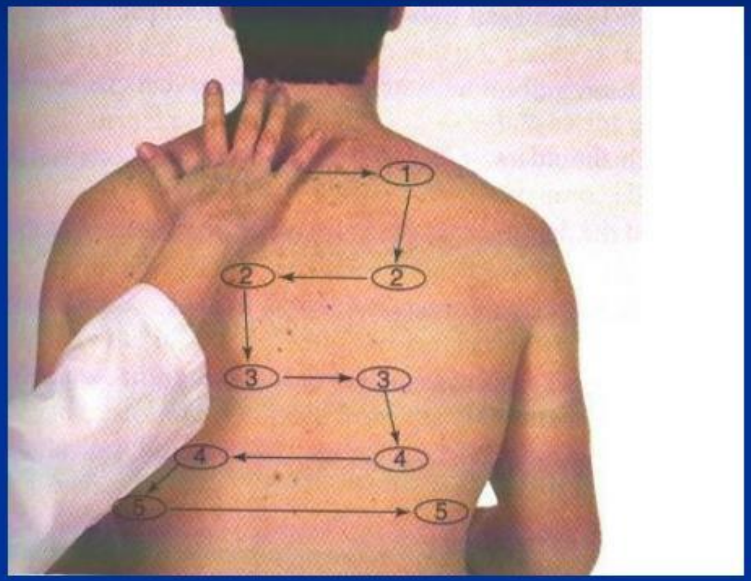
This can be done on the anterior of the chest or the posterior




CHEST
EXPANSION
TEST FOR
ANKYLOSING
SPONDYLITIS

# TVF Examination

## Posterior Chest




Tactile fremitus

- Place ulnar edge on skin; client repeats 99
- Symmetry is expected
- Decreases if sound transmission is obstructed

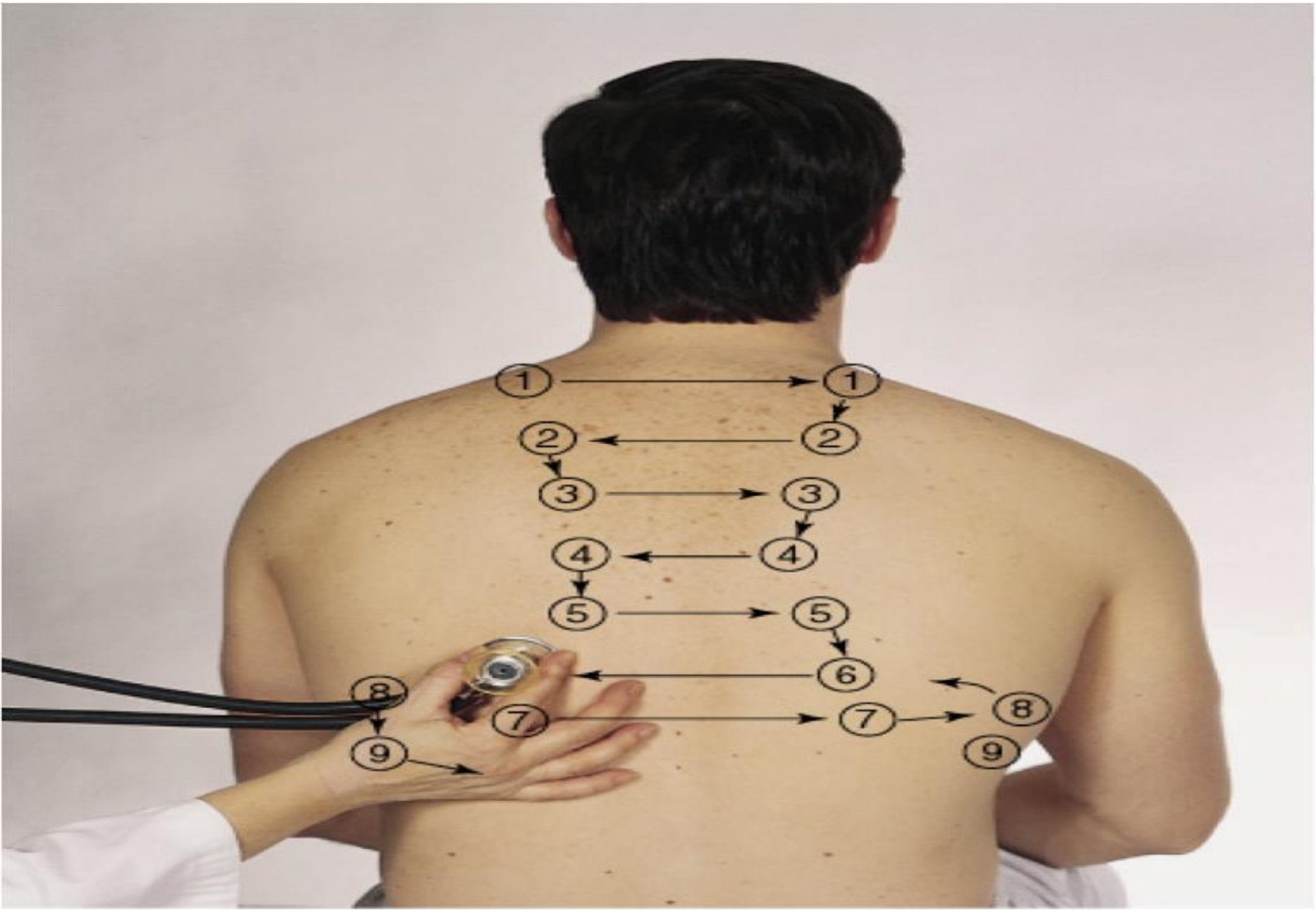
Palpate chest wall

# Percussion

- Hyperresonant with encroachment on hepatic and cardiac dullness
- Hepatic dullness at 7$^{th}$ space MCL
- Resonant bare area of heart

# Auscultation

- ***distant heart sound.***
- ***Diminished Vesicular breath sound with Prolonged expiration with generalized wheezing.***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# Other systems

- Normal

# What about your diagnosis

Chronic obstructive pulmonary disease (COPD) is a type of progressive lung disease characterized by long-term respiratory symptoms and airflow limitation.


Thank you