

History taking & examination of respiratory system

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objectives

- You need to know the common respiratory diseases symptoms
- What are the causes of the these symptoms .
- able to fully explore common symptoms of respiratory disease.

History taking

The most common symptoms of respiratory disease are:

Shortness of Breath (Dyspnoea)

Chest pain

Cough

Wheeze

Sputum production

Haemoptysis

Remember that these symptoms can also occur in :

Non-respiratory disease.

More than one part of the respiratory system

More than one pathology or mechanism

Chief complaint & history of presented illness

- Try to use the term SQITARPS in the analysis of each presentation/symptoms & as usual :
 - - site: mostly for pain
 - Quality : effect of daily life activities
 - Timing : onset , course , correlation with certain event & periodicity
 - Aggravating factors: as dust, cold, wind, laugh ect..
 - Relieving factors : as drugs or position ect...

SQITARPS continued

- Previous attacks: concentrate & use direct questions as it may be forgotten in chronic conditions, the same pattern or differ
- Secondary symptoms

cough:

- **Site:** If the cough is painful, where is the pain & what are the types of pain ?
- **Quality:** What does the cough sound like? E.g. Harsh, dry, barking, weak. Is it productive?
- **Intensity:** Is it disruptive to the patient's life? Is there syncope or near-syncope caused by prolonged coughing?
- **Timing:** How long has it been present and has it changed (progressive, induced or intermittent)?
- **Aggravating factors:** e.g. damp conditions, smoking, dust?
- **Relieving factors:** e.g. changing position, cough syrup

- **Previous episodes: Is there a pattern – time of year, weather, work? Was it the same or different from this presentation?**
- **Secondary symptoms: ask about other symptoms of respiratory disease(or related systems) and establish the relationship between them**

Haemoptysis

- Site : upper vs lower or pseudo-hemoptysis
- Quality : fresh vs altered
- Intensity : affect the daily life (blood always serious)
- Time: sudden , progressive , intermittent & correlated with special event as trauma or drugs use
- aggravating factors : position
- Relieving factors: drugs
- Previous attacks
- Secondary symptoms : SOB , pleuritic pain

SOB

Home work

Systemic review

- The closer system should be 1st
- May be the general , the cardiac or the GIT ?????
- Ask about the relevant points either positive i.e.. present or negative i.e. absent

Past medical hx

- ANY chronic die. Related or not
- Any same condition or presentation
- Surgical hx
- Neonatal hx for children & young age patients

Drugs hx

- Drugs in use
- Drugs abuse
- Allergy
- Hidden drugs
- Special treatment

Social hx

- Smoking & alcohol
- Job
- Hobbies
- Domestic animals
- Living hygiene
- Crowdness

Personal & family hx

- Any family dis.
- Any same condition

After completing the hx

- Summarized
- Explain to the patient & clarify the action plan with some explanation
- Put in your mind the differential diagnosis

Clinical examination

Overview

The respiratory examination should include the following:

- General inspection from the end of the bed.
- General examination of:
 - Hands / pulse
 - Face
 - Neck

Examination of the chest – repeated on the anterior and then the posterior chest wall.

- Inspection
- Palpation
- Percussion
- Auscultation

- Other systems related exam. As heart , abdomen for ascites, lower limbs edema ect..
- Bed side tests as flowmeter, oximetry ect.



Preparation

- Wash your hands
- Introduce yourself to the patient if you have not already done
- Ask the patients permission to carry out the examination
- Give a brief explanation to the patient before you start.

Equipment

- Stethoscope
- Peak Flow meter

Patient position

- Ideally the patient should be sitting at 45 degrees
- In female patients the bra will need to be removed for you to carry out the examination effectively. Do not expose the patient's chest until you are ready to examine.

General examination

General Observations

Look at the patient from the end of the bed. Note:

- Obvious discomfort/pain
- Colour
- Use of accessory muscles, tachypnea, audible breathing (e.g. wheezing, stridor).
- Note the respiratory rate (count for at least 30 seconds)
- Items around the bed (e.g. oxygen, chest drain, sputum pot, inhaler)

Face

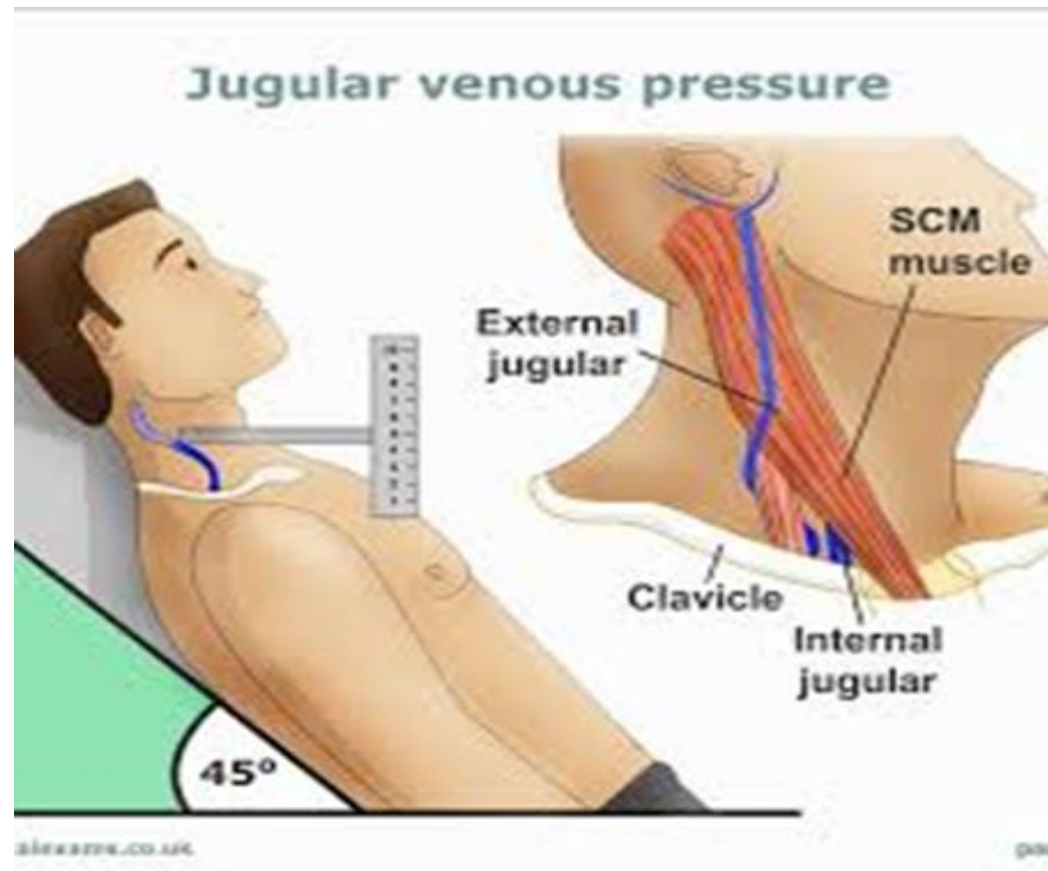
Gently pull down lower eyelids. Inspect for pale conjunctiva of anemia. Ask patient to open their mouth.

Look for central cyanosis



Neck

Check Jugular Venous Pressure (JVP) .With the head resting back on the pillow ask the patient to turn the head to the left . Look for pulsation along the right internal jugular vein to measure the JVP



Palpate for enlarged lymph nodes

Occipital

Post-auricular

Pre-auricular

Submandibular

Submental

Anterior and posterior cervical

Supraclavicular (including Scalene nodes)





Scalene Nodes

Examined with head slightly tilted to one side. Press down gently between clavicle and sternocleidomastoid toward first rib.

Enlargement may be the first evidence of metastatic lung cancer.

Local exam

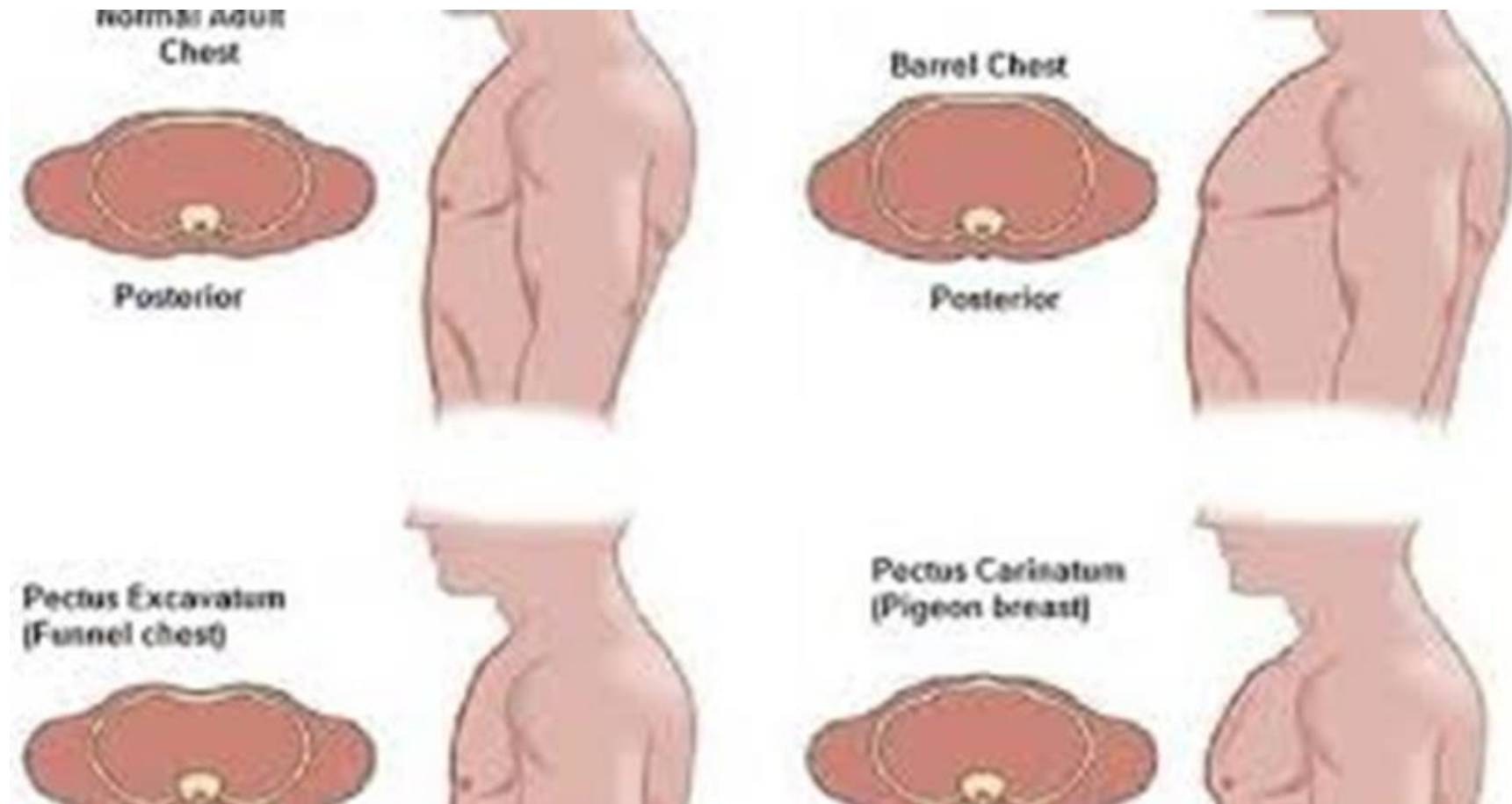
The Chest

- The chest wall must be examined completely (inspection, palpation, percussion, auscultation) for the front and then the back. Lymph nodes can be palpated whilst the patient sits up in between.

Inspection – anterior chest

With the chest exposed look carefully for

- Chest wall abnormalities e.g. barrel chest, pectus carinatum, pectus excavatum, Harrison's sulci, kyphosis and scoliosis.



Rachitic rosary , Harrison's sulci



- Breathing pattern and asymmetry of movement

Palpation anterior chest

- Feel for the position of the apex beat (lower mediastinum)
- Tracheal deviation (Warn the patient it may be uncomfortable and place a finger either side of the trachea, judging the space each side). It should lie centrally or slightly to the Rt..



Chest expansion.

Place hands around the chest, with thumbs extended and elevated from the chest wall. Ask the patient to take a deep breath. Your thumbs will move apart. Note the amount and symmetry of movement.



Percussion - anterior chest

Start from the clavicles and move from side to side down the chest wall and under the arms. the note produced are either tympanic, hyper resonant, dull



Percussion Place left hand flat on the chest wall. Press the middle finger firmly against the chest. Using the middle finger of the right hand, strike the middle phalanx of the middle finger of the left hand. The striking finger should be moved away again quickly so as not to dampen the sound produced. Movement of the striking hand is from the wrist.

Each area of the chest wall correlates with different areas of the lungs in both percussion and auscultation

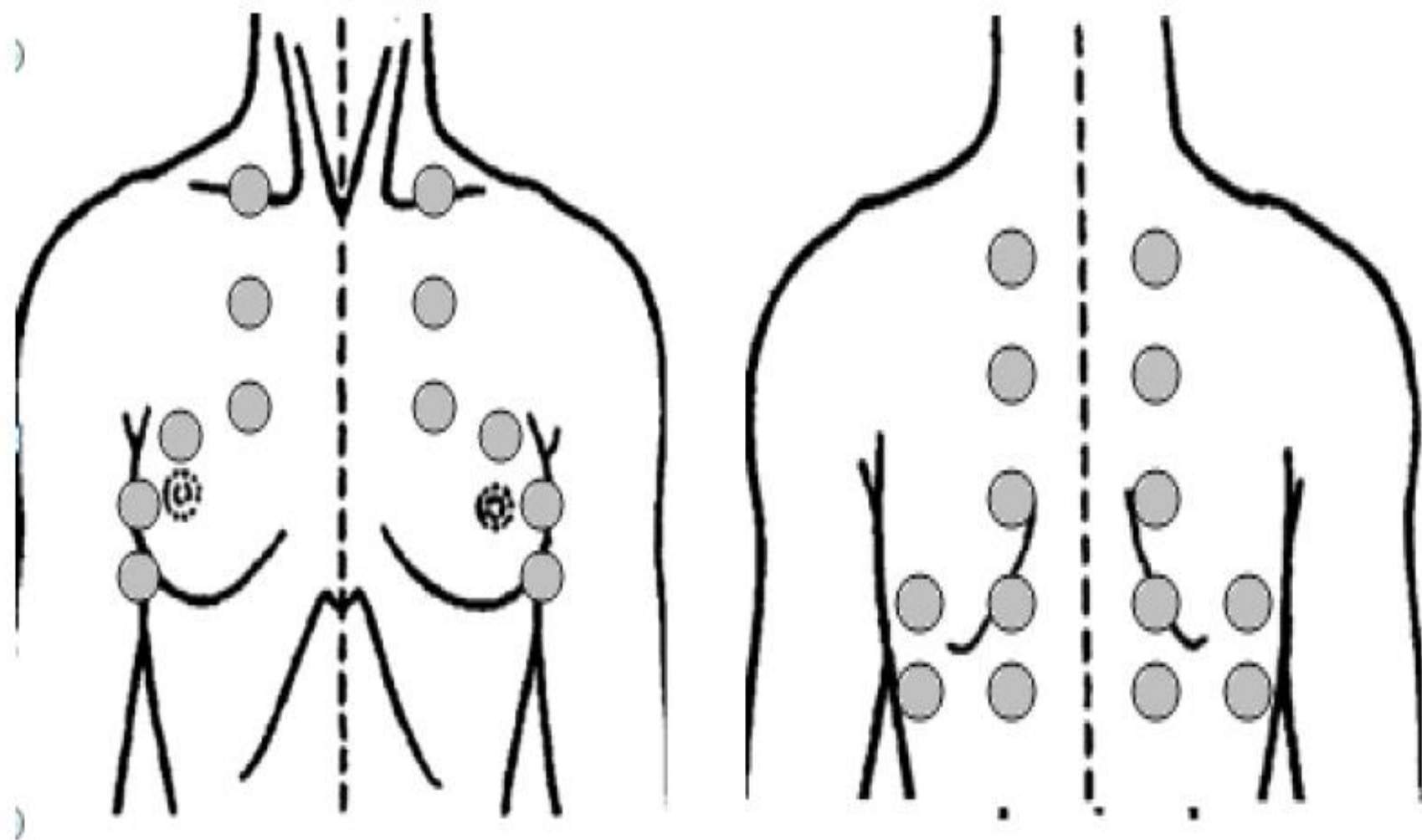
O anterior wall - upper lobes

O posterior wall - lower lobes

O right lateral wall - middle lobe

O left lateral wall - lingula

Points for percussion and auscultation are illustrated below:



Auscultation – anterior chest

Breath Sounds Ask the patient to keep breathing in and out through the mouth. Bear in mind the comfort of the patient – too many deep breaths may become distressing. Starting above the clavicle, listen at the same places that you percussed. Compare side to side and listen during both inspiration and expiration.

Vocal Resonance Ask the patient to keep repeating „ninety-nine“ while you Listen in the same places again using the diaphragm of the stethoscope comparing side to side You should be able to recognize changes in the transmission of sound and understand their significance,

Posterior chest wall - examination

Repeat inspection, palpation, percussion and auscultation on the posterior chest.

Tactile Vocal Fremitus (TVF)

Vocal Fremitus tests the same thing as vocal resonance. By placing the ulnar surface of your hands on chest wall you can feel rather than hear changes in transmission. TVF is generally considered less reliable. An advantage of testing for TVF is that you can compare sides directly so you may find it easier to detect differences while your skills of auscultation are still developing.

Completing the Examination

- Cover patient /assist to redress if necessary
- Thank the patient

Bed side tests

- o Peak flow
- o Temperature

Inspect sputum sample

Cardiovascular examination

Thanks

Any questions ?