



Introduction to Clinical Medicine



Lecture 3

History Examination- RS



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RS - History Examination

- Any apical lung mass can compress T1-root fiber as pancoast tumor (in Right Side for Ex.) cause neuropathic manifestation causing atrophy of the hand muscle on the Right and horner syndrome

- ⊙ A finding of Right hand Atrophy with apical lung
think about pancoast tumor
manifestations is Horner symptoms + Right hand atrophy (assymetrical hands)

Horner syndrome :

- miosis
 - ptosis
 - emprothmos
 - anhydrosis
- caused by sympathetic tone disruption

- ★ ● Right lung has 3 lobes . Left lung 2 lobes.
When You examine the patient from the posterior of his Chest and his Right Side, You'll examine his upper and lower lobe
If You want to examine the patient's Right lung or his post. chest ; DON'T FORGET TO EXAMINE HIM FROM LATERAL SIDE , because the middle lobe is lateral and can't be examined from post. chest

- ⊙ So I examine the Right lateral or anterior chest Because the middle lobe is exposed from the Right lateral and Anterior chest , to Rule out any pathology there

→ How can You ask about the common presenting symptoms and make a differential diagnosis from them ?

● Breathlessness

- . most common RS symptom
- . think about lung and cardiac causes , in addition to others
- . Hypoxia is low tissue oxygenation ; hypoxemia is low arterial (P_{aO_2}) oxygenation

● Causes of breathlessness

know cardiac , RS , and metabolic causes

- . metabolic causes as when patient have DKA or hyperosmolar non-ketotic acidosis
- . someone having Low Blood suger , came with shortness of breath or kussmaul breathing

You have to think about the different causes that may cause it

● Cardiac Cause of Breathlessness

- left ventricular failure
- constrictive pericarditis
- pericardial effusion
- tamponades
- Mitral / Aortic heart diseases
- ischemic Heart ds that can cause hypertrophic cardiomyopathy

- RS cause of Breathlessness

- PE
- pulmonary vasculitis like Goodpasture syndrome or Régnier syndrome (granulomatosis with polyangiitis)
- hemosiderosis

- Metabolic Acidosis causing Shortness of Breath

- DKA
- hyperosmolar nonketotic
- anemia (cause also chest pain)

- Anemia may cause chest pain because of decreased blood supply and O₂ to heart
- In any shortness of breath you have to rule out anemia and metabolic causes and sometimes insidious diseases

- Acute breathlessness associated symptoms

- when we say no chest pain pulmonary embolism (May come like that) but most characteristic pulmonary embolism come with pleuratic chest pain
- No chest pain + shortness of breath can come in pneumothorax but its most likely come with sharp chest pain
- Pulmonary embolism most likely come with pleuratic chest pain
- Metabolic acidosis most likely come without chest pain
- wheeze chest, think about obstructive lung disease as COPD, cystic fibrosis, and bronchiactis + Asthma

✓ ● Medical Research council staging

It would guide the management of COPD

- WHEEZE

- If you see a wheeze chest, think of:
 - COPD
 - asthma
 - bronchiactis
 - cystic fibrosis
- A diffused wheezy chest, narrowing of bronchus/airway
You have to think asthma or COPD
- Focal wheezy chest with coarse crepitation
think about bronchiactis
- localized wheezy chest (at for example left lower lobe) at one lobe or one side; think about cancer or foreign body

- Q of causes of wheeze

- wheeze and cough most likely develop at early morning (why?)
because it's most likely due to asthma, and cortisol levels would be low at early morning (2-4 A.M) so the bronchospasm increase would lead to wheezy chest

- You have to rule out any smoking history, allergy

- © cause if patient come with wheeze chest and more than 20 pack/year
You have to think about COPD

. History of allergy

- ⊙ any patient with sudden onset of Shortness of breath , urticaria , and wheezy chest You have to think about allergy
Manage with hydrocortisol + antihistamine

● Cough Questions

. duration

- ⊙ patient came with 3 Years history of cough with Sputum production
You have to think about chronic bronchitis

● associated symptoms with cough

. cough variant asthma (cough with NO other symptoms)

- ⊙ patient may have asthma but the presenting complain is cough No wheezy chest or other findings

. Rule out history of Smoking

- ⊙ patient with productive or chronic cough with Smoking history
keep on mind COPD or lung cancer ds

● SPUTUM

. If the color is rusty Red Sputum

Its pneumococcal pneumonia

- ⊙ patient with fever , Shortness of breath , Respiratory / chest finding that indicates pneumonia , Rusty Red sputum

Think of pneumococcal pneumonia

(pneumococcal pneumonia is the most common cause of pneumonia

- ⊙ patient come with pneumonia symptoms and current jelly sputum

You have to think about Klebsiella infection pneumonia

. Yellow sputum

- acute pulmonary infection
- asthma

. Green sputum (longer infection)

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- pneumonia
- bronchiectasis
- cystic fibrosis
- lung abscess

● Hemoptysis (coughing up blood from chest) (Not hematemesis)

. You have to clarify the symptoms from epistaxis , hematemesis , hemoptysis
↳ from GI ↳ from RS

- . clarify amount of blood ? mixed with sputum ? Duration ? frequency ?
- . Hemoptysis would give a clue about diagnosis

● Massive Hemoptysis number 50-100 ملو حنقا

depends on patients blood pressure along with the amount of Hemoptysis

- Large volumes of Hemoptysis suggests that:
 - Lung cancer invading pulmonary vessel
 - bronchiectasis
 - Cavitary ds as lung abscess
 - . You have to differentiate between lung abscess and empyema
 - lung abscess in the interstitial of lung
 - empyema usually in the pleural cavity
 - pulmonary vasculitis
 - granulomatosis with polyangiitis or eosinophilic granulomatosis with polyangiitis, which is any type of vasculitis that lead to Hemoptysis
 - pulmonary arteriovenous malformation
 - usually is massive bleeding

⊙ Patient with TB or cavitary ds that may cause cavitary lesion as lung abscess, if it invade the vessel, it'll lead to massive Hemoptysis

● STRIDOR

- . Inspiratory, expiratory. Inspiratory + expiratory (biphasic)
- just know how to differentiate stridor from wheezy chest

● Chest pain

- . take socrates for any pain
- . can originate from MSS, CVS, RS, GI diseases
- . pleural pain

⊙ think about pleuratic chest pain in:

- pulmonary Embolism
- pneumonia
- pneumothorax
- fractured Rib

● Massive PE will obstruct pulmonary artery, elevate pulmonary artery pressure and would cause signs and symptoms of Right Heart failure

- . Signs of HF if its due to pulmonary hypertension, its called cor pulmonale
- . Right-HF manifestations:
 - lower limb edema
 - elevated JVP
 - ascitis
 - hepatomegally

But with CLEAR LUNG

- . always think massive pulmonary emboli may cause cor pulmonale after causing pulmonary hypertension

- . any patient with chest pain don't assume he have GERD or any esophageal symptoms first of all you have to rule out cardiac cause

● Fever / Rigors / Chills

- . It's a systemic symptoms
- . If you see it, think about infection as lung abscess, empyema, or TB, and lymphoma
 - lung abscess
 - empyema
 - TB
 - lymphoma
 - malignancies with paraneoplastic symptoms
 - severe pneumonia

● Weight loss

- . If seen think about:
 - lung cancer
 - chronic infective ds
 - any chronic breathlessness cause as COPD, cystic fibrosis, bronchiectasis

● SLEEPINESS

- . the patient wakes up refreshed or exhausted
- . some patients have nonrefreshed sleeping and sleep during the day
- . Most of them have obstructive sleep apnea overlapped with Obesity hypoventilation Syndrome
- . Obstructive sleep apnea have recurrent waking at night due to decreased arousal? during the night
- . Difference in Obstructive sleep apnea and Obesity hypoventilation syndrome
 - CO₂ in obstructive sleep apnea is normal
 - CO₂ in obesity hypoventilation syndrome is more than 45

● Take Past Medical History

- . the hay fever, eczema, asthma may persist in patient life and may exacerbate

● Family / Social History

- . smoking → related to COPD (chronic bronchitis in patients who have COPD), lung cancer
- . occupation
- . home condition

● Occupational History

- . Asbestosis and coal dust cause lower lobe lung fibrosis (lower lobe interstitial lung ds)
- . Silica cause upper lung pathology
- . Silica is associated with TB activation

Ⓒ Patient have findings suggesting lower lobe interstitial lung ds

Keep in mind if its asbestosis, coal dust, or idiopathic pulmonary fibrosis

● FARM

- . extrinsic allergic alveolitis = hypersensitivity pneumonitis = farmer's lung
- Ⓒ. came with 1-2 months history of shortness of breath, low grade fever, exacerbating factor