

Respiratory Exam

1-Introduce yourself. Wash your hands. Sit the patient upright.

2-General appearance

- Consciousness, comfort colour, posture
- Rate, depth and pattern of breathing. Accessory muscles
- Cyanosis, cachexia, rheumatological disorders (ankylosing spondylosis)
- Cough (wet or dry), wheeze, hoarseness, stridor, gurgling
- Sputum, inhalers, oxygen, IV lines etc

3- Nails and Hands

- Clubbing (if present check for HPOA – wrist tenderness), peripheral cyanosis, staining from cigarettes
- Wasting (Pancoast tumour) – finger abduction and adduction.
- Flapping tremour: late and unreliable sign of severe CO₂ retention

4- Pulse

- Rate and rhythm (bounding in CO₂ narcosis). Count respiratory rate (at rest should be < 14 per minute). Sinus arrhythmia,

5- Blood Pressure

- Pulsus paradoxus - fall in sys BP > 10mmHg on inspiration

6- Face

- Eyes: lids, pupils, anaemia, jaundice (liver mets)
- Nose: block each nostril, polyps (associated with asthma), deviated septum (nasal obstruction), nasal flaring
- Mouth: pursed lip breathing, cyanosis, URTI
- Sinuses (and ears (otoscopy) when appropriate)

7- Neck

- Trachea: displacement, tug (inferiorly with inspiration). Accessory muscle use. JVP
- Nodes (incl supraclavicular). Subcutaneous emphysema

8- Inspection

- Scars, signs of radiotherapy
- Shape: funnel or pigeon chest, kyphosis and scoliosis
- Movement: symmetrical, intercostal indrawing, paradoxical breathing of the abdomen
- Prominent veins. Pemberton's sign: SVC obstruction – hold arms over head → facial

plethora, inspiratory stridor and ↑JVP

10- Palpation

- Expansion: the affected side does NOT expand – regardless of pathology
- Apex beat: not found then → ?hyper-expanded. Maybe displaced by pathology
- (pneumothorax, fibrosis, etc)
- Tactile fremitus: Feel with hand while patient says 99, each side front and back
- Compress sternum to spine → pain if fracture or bone tumour

11- Percussion

- Stony dull, dull, normal or hyper-resonant. (Ask patient to bring elbows together)

12- Auscultation

- Breath sounds
 - Symmetrical? Decreased? Length of inspiration vs expiration. Bronchial?
- Additional sounds
 - Crackles (inspiratory) - time, pitch, clear with cough. Early/medium - COPD, pneumonia. Late/pan fine - fibrosis, oedema. Late/pan coarse - bronchiectasis
 - Wheeze (expiratory) - pitch, single or multiple, clear with cough. Heard on inspiration implies severe narrowing.
 - Pleural rub (present in inspiration and expiration)
- Vocal resonance
- NB - beware the silent chest in asthma and COPD, the patient will be CO₂ retaining - vasodilation, bounding pulse, flap, confusion, headache.

13- Other systems

- Heart palpation and auscultation. Listen to P2: louder in pulmonary hypertension
- Check liver for mets, and for „ptosis“ due to hyperinflation
- Legs: DVT, oedema (pulmonary hypertension), cyanosis, clubbing of the toes, ↓capillary refill
- Temperature chart, peak flow meter/FEV