

## Cardiovascular Examination

### SETUP

- Hands, introduce, expose, 45° position
- Ask about pain before touching

### HANDS & ARMS

- Clubbing, peripheral cyanosis, splinter haemorrhages
- Osler's nodes, Janeway lesions, xanthomata
- Radial pulse: rate, rhythm, character, volume
- Capillary refill time

### FACE & NECK

- Xanthelasma, corneal arcus, malar flush, central cyanosis
- JVP: 45°, height above sternal angle (<4 cm)
- Carotid character, carotid bruit

### PRECORDIUM

- Inspect: scars (sternotomy, pacemaker scar), pulsations
- Palpate: apex beat position & character, heaves, thrills
- Auscultate (4 areas + axilla + neck): S1, S2, added sounds, murmurs
- Sit forward + expiration → AR; Left lateral → MS

### COMPLETE

- Lung bases: bibasal crepitations (LVF)
- Bilateral pitting ankle oedema, sacral oedema
- Hepatomegaly, peripheral pulses
- BP both arms, ECG, CXR

Murmurs: AS = ejection systolic → carotids · AR = early diastolic LSB · MR = pansystolic → axilla · MS = mid-diastolic rumble

## Abdominal Examination

### SETUP

- Hands, introduce, expose nipples to groin, lie flat (1 pillow)
- Ask about pain before touching; watch face throughout palpation

### HANDS & ARMS

- Clubbing (IBD, cirrhosis, coeliac), leuconychia (hypoalbuminaemia)
- Palmar erythema, Dupuytren's (liver), koilonychia (iron def)
- Asterixis (hepatic encephalopathy)

### FACE & NECK

- Jaundice (eyes first), anaemia (conjunctival pallor)
- Angular stomatitis, glossitis (iron/B12), parotid enlargement (alcoholism)
- Virchow's node (left supraclavicular — gastric/pancreatic cancer)

### ABDOMEN

- Inspect (9 regions): distension, scars, striae, caput medusae, stomas, visible masses
- Light palpate all 9 regions (start away from pain)
- Deep palpate: masses, guarding, rigidity
- Liver: dull to percussion upper; palpate from RIF upward on inspiration
- Spleen: palpate from RIF toward left upper; percuss Traube's space
- Kidneys: ballot bilaterally
- Shifting dullness / fluid thrill (ascites >1.5 L)
- Bowel sounds: listen 30 seconds; borborygmi, absent, tinkling
- Aorta: palpate for expansile pulsation

### COMPLETE

- Hernial orifices, external genitalia, PR / PV if indicated
- Urinalysis, LFTs, USS abdomen

## Respiratory Examination

### SETUP

- Hands, introduce, expose to waist, 45°
- Inspect: respiratory rate, accessory muscle use, work of breathing

### HANDS & ARMS

- Clubbing (suppurative lung disease, fibrosis, malignancy, CF)
- Peripheral cyanosis, tar staining, fine tremor (CO<sub>2</sub> retention)
- Asterixis (CO<sub>2</sub> flap): hold hands extended 30 seconds
- Bounding pulse (CO<sub>2</sub> retention)

### FACE & NECK

- Central cyanosis (tongue), Horner's syndrome (Pancoast)
- JVP elevated (cor pulmonale, PE, tension pneumothorax)
- Trachea: midline? Deviation away (effusion/tension) or toward (collapse/fibrosis)
- Cervical / axillary lymphadenopathy

### CHEST (FRONT & BACK)

- Inspect: deformity (barrel, pectus), scars, asymmetry, accessory muscles
- Palpate: expansion (compare sides), tactile vocal fremitus
- Percuss: upper → lower front & back; compare sides; cardiac + liver dullness
- Auscultate: breath sounds (vesicular/bronchial), added sounds
- Vocal resonance: "99" — increased (consolidation), decreased (effusion)

### COMPLETE

- SpO<sub>2</sub>, peak flow, sputum pot, CXR, spirometry
- Lower limb oedema (cor pulmonale)

Percussion: dull = consolidation/effusion/collapse · stony dull = effusion · hyper-resonant = pneumothorax/emphysema

## Neurological Examination (Upper + Lower Limb)

### UMN VS LMN

UMN: ↑tone, ↑reflexes, weakness (extensors UL / flexors LL), Babinski↑ · LMN: ↓tone, ↓reflexes, wasting, fasciculations, flaccid weakness

### UPPER LIMB

- Inspect: wasting, fasciculations, deformity, involuntary movements
- Tone: passive flex/extend elbow & wrist; pronator drift (arms out 10 sec)
- Power (MRC 0–5): shoulder ABD, elbow flex/ext, wrist flex/ext, grip, finger ABD
- Reflexes (C5/6 biceps, C7 triceps, C6 supinator): grade 0–4+
- Sensation: light touch, pin-prick, vibration (128Hz tuning fork), proprioception
- Coordination: finger-nose test; dysdiadochokinesis

### LOWER LIMB

- Gait: normal, spastic (scissor/hemiplegic), high-stepping (foot drop), broad-based (cerebellar), shuffling (Parkinson's)
- Inspect: wasting, deformity, foot drop, fasciculations
- Tone: roll leg on bed; clonus (≥3 beats = UMN)
- Power: hip flex/ext/ABD/ADD, knee flex/ext, ankle dorsiflexion/plantarflexion
- Reflexes (L3/4 knee, S1 ankle, Babinski S1/2)
- Sensation: all modalities; dermatomal or glove-and-stocking pattern?
- Coordination: heel-shin test, Romberg's sign

### COMPLETE

- Cranial nerves if indicated; cerebellar signs (DANISH)
- MRI brain/spine, nerve conduction studies, EMG

DANISH: Dysdiadochokinesis · Ataxia · Nystagmus · Intention tremor · Slurred speech (dysarthria) · Hypotonia