Physical Examination

1- ALL TIME GENERAL (Do this in all stations)

A . Introduction

-Prepare yourself and the patient -introduce yourself -take permission -request to have a chaperone -warm hands - hand hygiene -maintain privacy

-environment: light and temperature -explain to the patient what you will do before each step -mention exposure and position

-before palpation : always ask the patient if there is any pain + maintain eye to eye contact

B . General look

Form, sitting, general state (well or distressed) + **ABC LOOKS UNIQUE**

- conscious oriented alert to time place and person - breathing (normal or not)
- color (pallor or cyanosis or normal) - IV lines - oxygen (masks or pumps)
– odor – cachectic (or not) - shape & speech & sounds - clothing
- medical equipment – gait & posture - mention any abnormalities

C . Vital signs

-temperature – Heart Rate – Respiratory Rate – Blood Pressure – BMI
– O2 saturation

Station 1 : General Examination

After mentioning the (all time general) , start with specific **inspection** :

1 . Face :

eyebrows > loss in distal third (sign of hypothyroidism)

eyes > - jaundice in sclera -pallor in conjunctiva

mouth > - oral hygiene - oral ulcers - abnormal odor
- peripheral cyanosis on lips - angular stomatitis

tongue > -Asymmetry - central cyanosis under the tongue - fasciculations - glossitis - deviation

2 . Hands:

Inspection of Hands > - symmetry - deformities (ulnar deviation or arachnodactyly) - swellings - scars - color (pallor or pigmentations)
- palmar erythema - muscle wasting (dorsum & thenar muscles)

Inspection of Nails > - color (pallor or peripheral cyanosis or yellow nails)
- deformities (leukonychia, koilonychia, onycholysis, pitting, splinter hemorrhage)
- clubbing (4 steps: interphalangeal depth ratio >1 + hyponychial angle < 190° + schamroth's window is present + no nail bed fluctuations)

Palpation: (after taking permission, asking about pain + eye to eye contact)

- check capillary refill (less than 2 sec) - hands temperature (bilateral)
- dry or sweaty hands - general palpation of the hands for (tenderness)
- fine tremor and flapping tremor tests The end ☺

Station 2 : Lymph nodes

After mentioning the (all time general) , mention:

Position : sitting 90° , **Exposure** : above the nipples

Inspection

Neck and lymph nodes > - scars - abnormal masses - swellings

- pigmentations - dilated veins - rash - skin discoloration

- visible lymphadenopathy

Palpation : (after taking permission, asking about pain + eye to eye contact)

A. Neck lymph nodes :

From behind of the patient > examine

1.Submental 2.Submandibular 3.Tonsillar 4.Preauricular

5.Anterior Deep cervical 6.Scalene 7.Supraclavicular

From the front of the patient > examine

1.Occipital 2. Post. auricular 3. Posterior deep cervical

Say: No tenderness and No palpable lymph nodes (or lymphadenopathy).

B. Axillary lymph nodes : bilateral

>for right axilla, support the patients arm by your right arm + use your left to palpate

>for left axilla, support the patients arm by your left arm + use your right to palpate

Inspection of axillae > - scars - abnormal masses - swellings - pigmentations - rash - skin discoloration - visible lymphadenopathy

Palpation > medial + anterior + posterior + lateral **axillary** lymph nodes.

Say: No tenderness and No palpable lymph nodes (or lymphadenopathy).

C. Epitrochlear lymph nodes :

Same inspection and palpation. Except for the site of lymph nodes.

Remember to use your right arm for patient's right, left arm for patient's left.

IF there's any Lump or mass > use **SPACEPIT** to characterize it .

(SPACEPIT > site , position, attachment, consistency (soft or firm or hard) , edge , surface & shape , pulsations & thrills & bruits , inflammation , transillumination) .

Say that you want to examine the ***Inguinal lymph nodes*** + assess the hydration state of the patient.

The end ☺

Station 3 : Respiratory physical examination

ANTERIOR CHEST

Mention, **Position** : laying 45° , **Exposure** : above the umbilicus

Inspection

Mentioning the (all time general) from **the foot of the bed** , focusing on

1. chest shape (elliptical) + symmetry + chest expansion (taking deep breath)

2. Thoracoabdominal (female) or abdominothoracic (male) pattern of breathing

3. chest deformities (barrel chest or pectus carinatum or pectus excavatum… etc)

4.distress signs (tripod position, pursed lips, use of accessory muscles, tachypnea)

5. sounds include: wheeze, stridor, hoarseness.

6. Nubelizers and inhalers in medical equipment

Move to the **right side of the patient** >

Looking for : scars, lesions, swellings, dilated veins, visible masses ,

also look at the axillary and lateral sides of the chest. And tracheal tug.

Vital signs ✓ THEN **Face** >

eyes > - jaundice in sclera -pallor in conjunctiva

- Horner's syndrome signs: (ptosis + meiosis + anhydrosis) > apical tumors

mouth > - oral hygiene - oral ulcers - abnormal odor

- peripheral cyanosis on lips - angular stomatitis

tongue > -Asymmetry - central cyanosis under the tongue - fasciculations

- glossitis - deviation

Add ones: - facial plethora - facial congestion

- SVC obstruction (flushy face + dilated veins)

Neck > - Scars - swellings - masses - dilated veins - cervical lymph nodes

- JVP check (just mention it)

Hands >

Inspection of Hands > - symmetry - swellings - scars - palmar erythema

- color (pallor or pigmentations) - deformities (ulnar deviation or arachnodactyly)

- muscle wasting (dorsum & thenar muscles)

Inspection of Nails > - color (pallor or peripheral cyanosis or yellow nails)

- deformities (leukonychia, koilonychia, onycholysis, pitting, splinter hemorrhage)

- clubbing (4 steps: interphalangeal depth ratio >1 + hyponychial angle < 190° + schamroth's window is present + no nail bed fluctuations)

Add ones : - tar staining - yellow nail syndrome - Fine & Flapping tremor

- wrist tenderness (by palpation), in hypertrophic pulmonary osteoarthropathy.

Palpation : (after taking permission, asking about pain + eye to eye contact)

- *Superficial palpation :*

1. tenderness + palpable masses + surgical emphysema
2. check tracheal deviation (central) + cricosternal distance (3-4 fingers)

- *Specific palpation :*

1. Apex beat (5th intercostal space + mid clavicular line + gently tapping)
2. Right ventricular heave (No)
3. Tactile vocal fremitus , the patient says 44 . (symmetrical bilateral TVF all over the chest)
4. Chest expansion , two sites anterior : mid chest at nipple + below costal margins. Only one site posterior : below costal margins.

Say: symmetrical bilateral chest expansion , 2.5cm each side, 5 cm in total.

Percussion > you know how to do it ☺

Say : bilateral symmetrical resonant percussion note all over the chest.

Auscultation > use diaphragm, don't forget lateral sides.

1. Listen generally to all the chest (good bilateral air entry + symmetrical bilateral vesicular breathing + no added sounds like wheeze or stridor)
2. Vocal resonant, patient says 44. (symmetrical bilateral vocal resonant all over the chest)
3. Whispering pectoriloquy, patient whispering 44. (No whispering pectoriloquy)
4. Aegophony, patient says E. (No aegophony)

>mention that you wanna examine the

1-abdomen for hepatosplenomegaly & ascites

2- lower limbs for edema & erythema nodosum & DVT 3-sacral edema

- **Posterior chest** : all same as anterior chest except for position

Position : sitting upright 90° with crossing arms , **Exposure** : above umbilicus

First inspect the (all time general) from the foot of the bed while the patient at 45° , then change his position to 90° , do your inspection of posterior chest , then palpation , remember you have to do the **tracheal tug + deviation + cricosternal distance & the apex beat + RT. Heave** from the front so you need to change the patient's position again to 45° to do them, unless you are told to skip it.

Then back to 90° position, to do **TVF+ chest expansion** from posterior, then percussion and auscultation.

>don't forget the lung apex (apices) in palpation, percussion & auscultation.

Note the changes in percussion and ausculatation sites (your job).

The end ☺

Station 4 : CVS physical examination

1- Unstable patients : ABCDE approach (not our business)
2- Stable patients : do your physical exam.

Start with :

Position : lying 45° , **Exposure**: above the umbilicus

Inspection :

From the foot of the bed , mention the (all time general) +

1. chest shape (elliptical) + symmetry + chest expansion (patient taking deep breath)

2. Thoracoabdominal (female) or abdominothoracic (male) pattern of breathing

3. chest deformities (barrel chest or pectus carinatum or pectus excavatum… etc)

4.distress signs (tripod position, pursed lips, use of accessory muscles, tachypnea)

5. any dismorphic features (Down's or Marfan's or Turner's syndrome in females or Ankylosing spondylitis) 6. request **urine analysis**

From the right side of the patient >

- hair distribution - petechial rash - implantable devices - dilated vein - skin lesions - skin discoloration -inspect **apex beat** or visible pulsation with a torch - scars (midline sternotomy scar or left submammary scar or infraclavicular scar)

Face > - pallor - jaundice - conjunctival petechial hemorrhage - chorneal arcus - xanthelasmata - Fundoscopy for : retinopathy (DM or HTN) + roth spots - malar flush - facial plethora - central cyanosis (lips + tongue)

Hands > - tar staining - clubbing - cyanosis - splinter hemorrhage - oslar nodes - Janeway lesions - IV drug abuse - xanthomata -petechial rash

Palpation : (after taking permission, asking about pain + eye to eye contact)

Hands palpation : - temperature - dry or sweaty - capillary refill - fine & flapping tremor tests.

- **Pulses :**

1) Radial pulse :
   - rate & rhythm for 60 sec (60-100 bpm , regular , compressable)
   - radio radial delay - collapsing pulse (raise arm) - radio femoral delay
   - pulse deficit (radial – apex pulse , should be < 10)
2) Brachial pulse :

   -volume & character (normal) - measure blood pressure

3) Carotid :

   -volume & character (normal) , don't pressure both carotids together

   - tell the patient to hold their breath <u>on expiration</u> , then auscultate carotids for **bruit** (no carotid bruit) .

Station 5 : JVP physical examination

Mention the (all time general) , then go to the right side of the patient:

Position : lying 45° + tilting the head slightly to the left + head resting on a pillow .

Exposure: above the waist .

Inspection > diffuse inward movement + two peaks per beat . (use torch)

Palpation > not palpable . (after taking permission, asking about pain + eye to eye contact)

Special maneuvers :

1- Press at the root of the neck (It should decrease with neck compression)
2- Ask the patient to take deep breath and exhale it
   (it should be: decreasing with inspiration and increasing with expiration)
3- Pressure above the liver for 30 sec > hepato-jugular reflex
   (should be increasing > positive reflex)
4- Ask the patient to change his position, first to be supine (increasing) then let him sit upright (decreasing) .

Measurement : cm H2O unit

Put your ruler above the sternal angle on 90° with the ground

Use your torch to measure the height of JVP on the ruler

(The number you have + 5 cm = should be **< 9 cm H2O**.)

The end ☺

Station 6 : precordium physical examination

Position : lying 45° , **Exposure** : above the waist

Inspection >

Mention the (all time general) from the foot of the bed + mention :

-chest symmetry + shape - chest moves with respiration - chest deformities

From the right side of the patient >

- hair distribution - petechial rash - implantable devices - dilated vein - skin lesions - skin discoloration -inspect **apex beat** or visible pulsation with a torch
- scars (midline sternotomy scar or left submammary scar or infraclavicular scar)

Palpation > (after taking permission, asking about pain + eye to eye contact)

1- General palpation of precordium area
2- Localize Apex beat (5th intercostal space + mid clavicular line + gently tapping)
   If not palpable , roll the patient to the left.
3- Heaves : right ventricular heave (2 site) + left ventricular heave (one site)
4- Thrills : 5 sites (mitral + tricuspid + RT lower sternal edge + pulmonary + aortic)

Auscultation >

- **Diaphragm** : 4 sites + 2 radiation sites

  1.Apex for mitral + radiation to axilla 2. tricuspid 3. pulmonary

  4. aortic + radiation to carotid (let patient hold their breath)

- **Bell** : 2 sites

  Tricuspid + mitral then roll the patient over to the left while still listening.

- **Special maneuver**: for aortic regurgitation

  Let the patient sit upright + lean forward + hold breath on expiration

  Auscultate at : 1) aortic area 2) 3rd intercostal left sternal border (ERB's area)

  Say > (normal S1 + S2 / normal S2 splitting / no added sounds (ejection click or friction rub or opening snap) / no S3 / no murmurs or radiation) .

  And mention that you wanna examine :

  lungs for crackles + abdomen for ascites + sacral edema + lower limb for edema or ulcers or DVT.

The end ☺

Station 7 : peripheral vascular examination

Mention the (all time general) .

Position : supine , **Exposure** : abdomen & whole leg

Inspection > from the right side of the patient

-Color - muscle wasting (bilateral) by comparing leg circumference - swelling - dilated veins - hair distribution - venous guttering - thin or shiny skin - nails (clubbing, leukonychia, koilonychia, onycholysis… etc) - ulcers (site , size, margin, depth) + look between toes and below heels.

Palpation > (after taking permission, asking about pain + eye to eye contact)

-temperature - tenderness - edema (pitting or not) -capillary refill

-**Pulses** :

1- Popliteal > behind the knee + leg at 30° (present and felt hardly)
2- Posterior tibial (palpable)
3- Dorsalis pedes (palpable)

Mention: femoral artery pulsation + radio-femoral delay

***Burger's test** : 1) Raise the patients leg to 45° for 2-3 mins and look for pallor

Then, 2) ask the patient to sit upright and hang their legs over the edge of the bed, now you look for reactive hyperemia .

- Negative burger's test.

***ABPI:** ankle brachial pulse index . just mention it . (normally > 1)

After all , mention that you wanna examine :

- Abdomen for ascites or hepatomegaly
- Sacral edema
- DVT

The end ☺

Good luck everyone in your first OSCE! ♥