

# Complete CVS PEx checklist - Ahmad AlHurani (1.1)

## WIPPER and the intro

- Introduce yourself and shake hands
- Washing of hands and appropriate hand hygiene
- Asking for permission
- Ensuring the room's privacy
- Ensuring the environmental warmth and good lighting conditions
- Asking for appropriate exposure (from the waist and above)
- Asking the patient to be in the appropriate position (semi-sitting at 45 degrees in bed)
- Relocating to the right side of the patient
- Asking for a chaperon
- "I have all of my equipment's"

## General look of the patient

- Consciousness, alertness and orientation** of the patient to time, place and person (After asking the 3 questions)
- Comment on the patient's **position and comfort**
- Comment on the patient's **external devices** status (No oxygen masks, nebulizers etc.)
- Comment on **respiratory rate (Not tachypneic), respiratory distress**
- Comment on **cyanosis**
- Comment on **edema**

## Vital Signs

- Measure the vital signs (make sure you can mention all of them + BMI)

## Hands

INSPECTION: Starting with the hand

- No cyanosis
- No pallor
- No palmar erythema
- No petechial rash
- No Xanthomata (Hyper-lipidemia)
- No Janeway lesion's (not painful, thenar region) (Infecting endocarditis)
- No Osler's nodes (painful, tip of fingers) (Infective endocarditis)
- No tar staining
- No IV drug abuse signs

moving on to the nails;

- No clubbing
- No splinter hemorrhages (Infective endocarditis)

End this section by examining for tremor

- Examine for fine tremor

### **PALPATION of the hands:**

- Check hands' temperature, dry/sweatiness
- Check Capillary refill (<2 seconds for normal cap refill)

Check pulses (BILATERALLY)

All pulses are done with 2 fingers, except for radial;

### **Radial pulse**

- Radial pulse; using 3 fingers, lateral to flexor carpi radialis, after 1 minute (do 15sec) , comment on the rate, rhythm, volume, character and compressability.
- Check both radial pulses simultaneously to assess "Radio-radial delay", a sign for aortic dissection
- Check radial and femoral pulses simultaneously to assess "Radio-femoral delay", a sign for aortic coarctation (ONLY MENTION)

- Calculate pulse deficit, we don't do this during exams (Mention it), but a difference of +10 BPM is abnormal
- Now ask the patient about shoulder pain first, if none is present, elevate hand above level of patient's head while checking the radial pulse, to check for "Collapsing pulse"
- Don't forget to comment your findings, mention the HR measured, regular rhythm, normal volume, normal character, compressible, no radio-radial/radio-femoral delays, no pulse deficit, no collapsing pulse.

## **Brachial pulse**

- Using 2 fingers, assess the brachial pulse medial to the biceps tendon in antecubital fossa. (Bilaterally)
- Mention rate, rhythm, volume, character and compressability

## **Carotid pulse**

- Using 2 fingers, gently assess the carotid pulse anterior to sternocleidomastoid near the jaw.
- Bilaterally, but Never feel both sides at the same time as that might trigger vasovagal attack, comment on rate, rhythm, volume, character and compressibility
- Ask the patient to hold his breath, and auscultate for the bruit
- Comment on the bruit

**Femoral (mention only), posterior tibial and dorsalis pedis are done in PVS / we do them if the station was a focused pulses station**

## **Face**

- Check eyelids for xanthelasmata (Hyper-lipidemia)
- Check iris for Corneal arcus (Hyper-lipidema)
- Check conjunctiva for pallor and petechial hemorrhage (Infective endocarditis)
- Mention that you need fundoscopy to check for Roth spots (Infective endocarditis), HTN/DM changes
- Check for malar flush on cheeks

- Check for any signs of central cyanosis (Under the tongue), peripheral cyanosis (On the lips)

## JVP Examination

As JVP is very important and might be a full station on its own, make sure you're ready for it.

### Inspection

- Rest the pt's head on a pillow (Make sure its rested, we need sternocleidomastoid relaxed), ask him to turn his head slightly to the left, using a torch, try to find JVP pulsation.
- comment, Double peaked, Inward pulsating JVP

### Palpation

- After doing the usuals for any palpation, try to palpate it

JVP is normally impalpable, so make this comment and move on

- Compress the root of the neck, JVP should disappear, comment that it disappeared after compressing root of the neck
- Ask the patient to lie flat → Increased JVP (comment)
- Ask the patient to sit straight → Decreased JVP (comment)
- Ask the patient to take a deep inspiration → Decreased JVP (comment)
- Check abdominojugular reflux, press on the Rt upper quadrant for 30 seconds (don't do full 30 of course) , on a positive reflex (normally positive), JVP increases (comment whether positive or negative reflex)

### Measuring JVP

- Use a ruler, put it on the sternal angle (Straight with the ground not pt's body), assess using a straight object that's put on the highest pulsation you see of the JVP, measure on the ruler and add 5cm and comment on the measured JVP (Normally it's <9cmH<sub>2</sub>O)

## Precordium Examination

### Inspection

From the foot of the bed;

- First ask the patient to take a deep breath
- Comment “Symmetrical chest with no visible deformities, bilateral movement of chest with respiration”

From the right side of the pt;

- Check for scars, make sure you know what scars mean; midsternotomy is for CABG, left submammary is for mitral valvotomy, infraclavicular is for pacemakers. (mention no scars)
- mention no swellings, visible masses, dilated veins.
- mention normal hair distribution
- Using the torch, mention afterwards that you see no visible pulsation/no visible apex beat

Palpation

- hand hygiene, warm hands, ask for permission, ask for presence of any pain, hold eye to eye contact to assess tenderness
- generally palpate the chest, don't miss any point, use your whole hand
- comment no palpable masses, no tenderness

Apex beat

- Try to find it using your whole hand
- try to find it using 2 fingers (roll the pt to the left side if you couldn't find it)
- locate it → which intercostal space, is it midclavicular?
- Comment; gently tapping apex beat, located in the 5th intercostal space, midclavicular line.

Heaves

- Ask the patient to hold breath, assess both right ventricular heave (lower left sternal angle), and left ventricular heave (apex, hence “apical heave”) (EXPIRE AND HOLD)
- Comment! No right or left ventricular heaves

Thrills

- Using your flat fingers; not the tips nor the base, check for thrills in 4 locations; apex, parasternal, right and left second intercostals.

Comment! No thrills

#### Auscultation

First, with the diaphragm, 6 spots

4 valvular spots, Mitral, tricuspid, aortic and pulmonary

2 radiation spots;

1 carotid, for radiation of aortic stenosis

1 left axilla, for radiation of mitral regurgitation

Second, with the bell, 4 spots

4 valvular spots (some only use the bell for mitral and tricuspid, you'll not be penalized for more spots anyway)

Last, finish with 2 maneuvers

Aortic regurgitation, using the diaphragm, ask the patient to sit straight and then lean forward, examine (aortic area), and Erb's area.

Mitral stenosis, using the bell, ask the patient to roll to his left side and then put the bell on the apex.

Comment on the whole auscultation; "Normal S1,S2, no S3,S4, normal physiological splitting of S2, no murmurs, no added sounds like opening snap, ejection click or friction rub

## Ending the station

I will auscultate lung bases for crackles

I will examine the abdomen for ascites; hepatomegaly, sacral edema

I will examine lower limb for edema, ulcers, pulses

# Complete RS PEx checklist - Ahmad AlHurani (1.2)

## WIPPER and the intro

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- Ensuring the environmental warmth and good lighting conditions
- Asking for appropriate exposure (from the waist and above)
- Asking the patient to be in the appropriate position (simi-sitting at 45 degrees in bed)
- Relocating to the right side of the patient
- Asking for a chaperon
- "I have all of my equipment's"

## General look of the patient

- Consciousness, alertness and orientation** of the patient to place, time and person (Asking the 3 questions) - **in RS, disorientation is a sign for CO2 retention, it causes confusion (Hypercapnia)**
- Commenting on the **patient's position and comfort**
- Commenting on the patient's **external devices** status (No oxygen masks, nebulizers etc.)
- Commenting on **respiratory rate (Not tachypneic), respiratory distress** (Mention these 2 markers)
  - 1) No apparent use of **accessory muscles** for breathing like sternocleidomastoid, trapezius and scalene)
  - 2) No Indrawing of **intercostal spaces**

- Commenting on **cyanosis**
- No abnormal **sounds**
- No abnormal **odors**

## Vital signs

- Measure the vital signs (Memorize them)
- What is **pulsus paradoxus**?

-**BMI is vital** in respiratory system, obese patients may get Obstructive sleep apnea  
-

**Weight loss** in COPD patients **increases risk of morbidities** (++inflammatory cytokines = ++metabolic rate)

## Hands examination

- No **deformities / amputations**
- No **palmar erythema**
- No **pallor**
- No **scars, swellings and no visible masses**
- No **tar staining**
- No **muscle wasting** (thenar and hypothenar)
- No **clubbing** (May be asked to do the 3 tests, nail bed angle/ schamroth's window/ fluctuations)
- No nail deformities ~ **Yellow nail syndrome**
- Check **temperature + dryness/sweatiness**
- Test for **fine tremor**
- Test for **asterixis (Flapping tremor)** ~ CO2 retention
- Test for **HPOA (Hypertrophic pulmonary osteoarthropathy) (Wrist tenderness)**
- Test for **Capillary refill** (1 minute pressure on the nail, refill in <2 seconds)
- Check **radial pulse**



## Face examination

- Comment on having no **plethoric face**
- Comment on having no **face swelling**

By examining the **eye**, make these 3 comments:

- No **Jaundice** (Examining the sclera)
- No **pallor** (Examining the color of conjunctiva)
- No **conjunctival edema**
- Check for **Horner syndrome** (3 signs; **ptosis, meiosis, anhidrosis**)
- No **nasal flaring**
- No **pursed lips**
- Comment on **cyanosis** (Peripheral on lips, central under the tongue)
- Comment on **good oral and dental hygiene**

## Neck examination

- No **scars, swellings, visible masses**
- No visible **dilated veins**
- Examine **JVP** (SKIP)
- Examine cervical **lymph nodes** (SKIP)

## Chest Examination ; Inspection

**First, relocate to the foot of the bed**

- Comment on symmetrical elliptical in cross section (**Shape**)
- Before chest expansion, ask the patient to **take a deep breath first!**
- Comment on bilaterally symmetrical **chest expansion**
- No **chest deformities** (kyphosis, scoliosis , pectus carinatum, pectus excavatum, barrel chest)
- Normal bilaterally symmetrical **breathing pattern** that's Abdomeno-Thoracic
- Pemberton sign** (raise both of your hands) to check for SVC obstruction

**From the right side of the patient**

- No **Scars, swellings, visible masses**
- No skin **lesions** ~ **Subcutaneous nodules** (Malignancy)
- No **visible dilated veins**
- Normal **hair distribution**
- Check the **axilla** too!!!!

## Chest Examination ; Palpation

Before palpation, ensure **hand hygiene, hand warmth**, ask for **permission to touch**, ask for **presence of any pain**, mention and actually hold **eye contact to check for tenderness**.

### 1) General palpation:

- Palpate using the palm of the hand around the chest

Mention that you found:

- No **tenderness**
- No **subcutaneous emphysema**
- No **palpable masses**

### 2) Upper mediastinum palpation:

- Using 3 fingers, check for tracheal deviation (comment that it's centralized)
- Ask the patient to take a deep inspiration, to check for tracheal tug
- Comment on no tracheal tug
- Measure the crico-sternal distance (Normally; 3 to 4 fingers)

### 3) Lower mediastinum palpation:

- Using **palm of the hand** at first, then **two fingers; locate the Apex beat**
- After locating it**, start from the sternal angle, horizontal with 2nd intercostal space, count and mention the position of apex beat (Normal pos is in 5th intercostal space, mid clavicular line)
- Mention that it's **gently-tapping apex beat!** / gently raises the pulsating finger!

Using floor of the palm; putting it in the **lower-left sternal angle**; locate the **right ventricular heave**, should be negative (sign of severe pulmonary hypertension)

#### 4) Last tests

Test for **tactile vocal fremitus** by using palm of the hand on 4 points anteriorly, 4 points posteriorly, 3 points laterally. (SAY اربعة واربعين)

Comment on **normal bilaterally symmetrical tactile vocal fremitus**

Test for chest expansion, **upper and lower anteriorly**

Test for chest expansion, **only once posteriorly**

Normal chest expansion is around 2.5cm on each side!

Comment on normal bilaterally symmetrical **chest expansion**

## Chest Examination ; Percussion

**We percuss using the left hand's middle finger on the position, and flexing on the right wrist joint only (NOT THE ELBOW) tap on the middle phalanx using right middle finger!**

### **PERCUSS BILATERALLY!!**

Start percussing for the lung apex (left hand pointing posteriomedial)

Percuss on the **clavicle heads** with **only your right middle finger**

Percuss from the 2nd intercostal space and keep going space by space

Anteriorly and on the right, **find the liver's level**

**Percuss laterally**

**Percuss posteriorly** (Ask patient to hug a magical pillow!)

**Calculate diaphragmatic excursion on each side!** (Remember what we ask the patient for ~ deep inspiration etc) - normal distance 5-8cm

**Comment on having normal, bilaterally symmetrical resonant percussion note**

## Chest Examination ; Auscultation

**Get your stethoscope ready!** set it to use the diaphragm (large one), test that by **GENTLY tapping it, WARM** it by rubbing it.

Ask the patient to face the other side (his left side; you're on the right side right? wait right?!)

Ask the patient to take a deep inspiration and expiration every time the stethoscope touches him (**FROM THE MOUTH** and NOT THE NOSE)

Listen to chest sounds using diaphragm of stethoscope on the lung apex, anterior chest, lateral and posterior chest.

Comment on normal **bilaterally symmetrical vesicular breathing sound with inspiration phase longer than expiration**

Comment on good bilateral **air entry**

Comment on having no added sounds (examples; wheeze, crackles, pleural rub)

### **Vocal resonance (Non-tactile)**

Listen to the chest again, same positions but instead of deep insp/exp ask the patient to say اربعة واربعين

Comment on **normal bilateral vocal resonance**

### **Whispered pectoriloquy**

Listen to the chest again, same positions but instead of deep insp/exp ask the patient to WHISPER (يهمس اربعة واربعين)

Comment on hearing **no whispering pectoriloquy**

### **Aeogophony**

Listen to the chest again, same positions but instead of deep insp/exp ask the patient to say E

Comment on hearing **no aeogophony**

## **ENDING the station!**

I would like to request **ENT examination** for my patient to check his upper airways

I would like to examine the abdomen for **hepato-splenomegaly** and **ascitis**

I would like to examine lower limbs for **edema**, **erythema nodosum**, signs of **DVT**

# Complete G.I PEx checklist by Ahmad AlHurani (1.1)

## WIPPER and the intro

- Introduce yourself and shake hands
- Washing of hands and appropriate hand hygiene
- Asking for permission
- Ensuring the room's privacy
- Ensuring the environmental warmth and good lighting conditions
- Asking for appropriate exposure (from the xiphisternum to the symphysis pubis) (nipples to mid thigh originally)
- Asking the patient to be in the appropriate position (flat with 1/2 pillows ~ 10-15degrees)
- Relocating to the right side of the patient
- Asking for a chaperon
- "I have all of my equipment's"

## General look of the patient

- Consciousness, alertness and orientation** of the patient to time, place and person (After asking the 3 questions)
- Comment on the patient's position and **comfort~**
- Comment on the patient's **external devices** status ~ drains, catheters,..
- Patient is not in distress, tachycardia, cachectic or obese
- No **skin redundancy\*\*\***

## Vitals

- Make sure you know the 6 vital signs
- Take height and weight to calculate BMI and assess nutritional status of the pt

## Hands

Starting with the nails:

- Do a quick glance for clubbing, No finger clubbing
- No koilonychia (IDA), leukonychia (Hypoalbuminemia)

Moving to the still-hand-examination

- No dupuytren's contracture (Alcohol related chronic liver diseases)
- No muscle wasting
- No tar stain
- No palmar erythema
- No pallor
- No I.V drug abusing marks

Moving to the palpation part of hand examination + tests

- Do the usuals for palpation, then palpate hand's temperature and dryness/sweatiness (Bilaterally)
- Test for flapping tremor (Asterixis) (Don't apply resistance!!)

## Face

Eyes;

- Ask the patient to look down and retract upper eyelid to expose sclera
- Comment "No jaundice"
- Do the opposite of first tick, examine conjunctiva for pallor

Cheeks and lips;

- No visible **sialadenitis or sialadenosis (Parotid swellings; chronic alcohol abuse, bulimia nervosa)**
- No spider nevi (Better mentioned on chest!!)
- No aphthous ulcers (Celiac, IBD but m/c idiopathic)

Mouth;

- No angular cheilitis (Iron deficiency)

- No atrophic glossitis (Iron deficiency)
- No beefy tongue (deficiency of B12/folate)
- No halitosis (Fetor hepaticus (Chronic liver diseases), alcohol, uremia, ketones..)
- Comment on good oral hygiene

## Neck

- left supraclavicular node enlargement (Troisier's sign) (Gastric, pancreatic CA)
- Widespread lymphadenopathy, hepatosplenomegaly → Lymphoma

## Chest

- Normal hair distribution
- Comment on: Scratch marks,
- No spider nevi
- No gynecomastia (Male) / breast atrophy (Female)

## Abdominal Exam

If this was your osce station, proceed with WIPPER and then directly;

### Inspection; Foot of the bed

Comment on 3 things;

- 1- Contour (Flat, Protuberant, Scaphoid) ~ abdomen might be filled with the 5F's +Symmetry
- 2- Umbilicus (Normally it's centrally located, inverted) ~ (Can be shifted/everted)
- 3- Ask the patient to breath, comment on "Normal abdominal breathing (abdomen moves with respiration)

### Inspection; Right side of the pt

5 S's, 2 P's, 1 D, 1 B, and hair

- No scars, swellings, skin lesions
- No stomas, striae
- No visible peristalsis

- No visible pulsations
- No visible dilated veins (~Caput medusa)
- No bruising
- Normal hair distribution

### **Maneuvers;**

Ask the patient to **cough facing his left side** while **looking at his hernial orifices**

- Comment on “no cough impulse” / “no bulging masses

Ask the patient to **raise his head** (No resistance!!)

- Comment on “no divercation of recti

### **Palpation**

First, as always, **usuals of palpation** (hand hygiene, warmth, permission, ask about pain, hold eye to eye contact)

Second!! **SIT ON THE CHAIR**

#### **Light**

- Comment that you’re doing light palpation to gain pt’s confidence.
- Gently! palpate the 9 regions
- Comment “Soft and lax abdomen, no guarding, no superficial masses, no superficial tenderness”

#### **Deep**

- Deeply palpate 9 regions of abdomen
- Comment “No deep masses, No deep tenderness”

We stopped doing murphy’s sign and rebound tenderness as they’re pointless and might trigger pain

Dr nadia tips after finishing palpation;

-Start by examining organs, with each organ, palpate then percuss directly, and we do every one of them while asking pt to breath (Lead his respiration, ask to inhale and exhale)

-Orient your hands by keeping the fingers parallel to the rib cage

-Normal liver span is 6-12cm



-Spleen → Percuss it only on 9,10,11th ribs, it's dull and non-ballottable normally. During spleen's maneuver, after rolling the patient with your left hand, start from the umbilicus to save time.

## **Back to the steps! LIVER; palpation**

Place your hand on RIF, parallel to rib cage, ask the patient to mouth-breathe, ask to inspire → push deep, ask to exhale → release, moving 1cm at a time until you get to either the liver edge or rib cage.

You have 2 choices,

if you found the edge, ask the patient to hold his hand on the point and comment; smooth, sharp, non tender liver edge

if you didn't, you'll have to percuss in upward direction afterwards.

## **LIVER; percussion**

Ask the patient to hold his breath after full expiration.

Starting from 2nd intercostal space, percuss downwards until the tone changes from resonant to dull indicating highest point of liver span

measure from this point to the other point the patient is holding (6-12cm is normal liver span) and comment on it's span and no hepatomegaly

(Percuss upward if u didn't feel liver edge, look for the point of tone change from tympanic to dull (no breathing required), measure..

## **Spleen; palpation**

Again, start from RIF and go diagonally 1 cm at a time, do same steps of liver including breathing, but here you'll 100% not feel the spleen as its normally impalpable

Ask the patient to roll towards you and hold him with your left hand

Restart palpating from the umbilicus region

## **Spleen; percussion**

Only percuss on 9,10,11th ribs mid axillary and comment on normal dullness, no palpable spleen.

## **Kidney; palpation (3 tests)**

- Bimanual test: left hand is always below, palpate by right hand over the flanks, again just like other organs, ask the patient to breath.
- Ballotement test: just after bimanual test, pump using the left hand that's below the flank, and feel the kidney with the right hand
- Comment on palpable, ballottable kidney, not tender, not enlarged
- Ask the patient to sit, fist his constovertebral angle twice, while holding eye-eye contact to assess renal angle tenderness
- Comment on no renal angle tenderness

## **Kidney; percussion**

- Percuss bilaterally pt's flanks
- Comment on resonant kidney percussion
- Percuss the urinary bladder ~ Dull for full bladder, tympanic for empty one.

## **Ascites assessment**

3 tests, 2 done, 1 mentioned

1- Shifting dullness;

- Start below xiphisternum, percussing with fingers horizontal, and find a very loud tympanic percussion note to help you.
- from that point, rotate finger to be vertical and start going laterally (towards you, for easier operation) until you find a dull spot
- Ask the patient to roll while holding your hand (To his left side) (mention that you will wait 15 seconds but don't actually wait)
- percuss again, it should still be dull normally
- comment on no shifting dullness

2- Transmitted thrill

- Ask the patient to put edge of his hand on the midline, place one of your hands flat on a side, and with the other one, flick a finger against its side, if you feel nothing on the flat hand; (DO IT BILATERALLY)
- mention no transmitted thrill (Normal no ascites)

3- Mention succussional splash test; don't actually do it!!

## Auscultation

3 things to auscultate for; (All using diaphragm)

1- Bowel sounds;

- Put the diaphragm on paraumbilical areas
- Comment on present bowel sounds (Normally, if you didn't hear any, wait upto 2 minutes)

2- Bruits

- Above umbilicus → Aortic bruit
- Comment on no aortic bruit
- 2cm above, 2cm lateral to umbilicus → Renal artery bruit
- Comment on no renal artery bruit
- 2cm below, 2cm lateral to umbilicus → Iliac artery bruit
- Comment on no ilical artery bruit

3- Friction rub over organs;

- RUQ for liver → No friction rub
- Spleen area → No friction rub
- Kidney area → No friction rub

## Ending the station;

- I will examine the external genitalia (we do that to assess genitalia atrophy in case of chronic liver diseases)
- I will examine PR
- lower limb for edema,
- pyoderma gangrenosum
- auscultate femoral artery for its bruit
- sacral edema!!
- Hernial orifices

# Complete CLD Stigmata examination - Ahmad AlHurani (1.0)

Deeply focus on **points in bold**



## WIPPER and the intro

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- Washing of hands and appropriate hand hygiene
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- Ensuring the room's privacy
- Ensuring the environmental warmth and good lighting conditions

- Asking for appropriate exposure (from the xiphisternum to the symphysis pubis) (nipples to mid thigh originally)
- Asking the patient to be in the appropriate position (flat with 1/2 pillows ~ 10-15degrees)
- Relocating to the right side of the patient
- Asking for a chaperon
- "I have all of my equipment's"

## General look of the patient

- Consciousness, alertness and orientation** of the patient to time, place and person (After asking the 3 questions)
- Comment on the patient's position and comfort~
- Comment on the patient's **external devices** status ~ drains, catheters,..
- Patient is not in distress, tachycardia, cachectic or obese

## Vitals

- Make sure you know the 6 vital signs
- Take height and weight to calculate BMI and assess nutritional status of the pt

## Hands

Starting with the nails:

- Do a quick glance for **clubbing**, No finger clubbing
- No koilonychia (IDA), **leukonychia** (Hypoalbuminemia) [Mention **Terry's Nails**, type of apparent leukonychia, characterized by ground glass opacification of nearly the entire nail]



Moving to the still-hand-examination

- No **dupuytren's contracture** (Alcohol related chronic liver diseases)
- No muscle wasting
- No **palmar erythema**
- No **Hypertrophic osteoarthropathy** [Hypertrophic osteoarthropathy (HOA) is a medical condition that combines clubbing and periostitis of the small hand joints, especially the distal interphalangeal joints and the metacarpophalangeal joints<sup>1</sup>. Distal expansion of the long bones as well as painful, swollen joints and synovial villous proliferation are often seen]
- No I.V drug abusing marks

Moving to the palpation part of hand examination + tests

- Do the usuals for palpation, then palpate hand's temperature and dryness/sweatiness (Bilaterally)
- Test for **flapping tremor (Asterixis)** (Don't apply resistance!!)

## Face

Eyes;

- Ask the patient to look down and retract upper eyelid to expose sclera
- Comment "No **jaundice**"
- Do the opposite of first tick, examine conjunctiva for **pallor**

Cheeks and lips;

No visible **sialadenitis or sialadenosis (Parotid swellings; chronic alcohol abuse)**

No **spider nevi (Better mentioned on chest!!)**

Mouth;

No halitosis [**Fetor hepaticus** (Chronic liver diseases)]

## Neck (Nothing specific to the stigmata here)

### Chest

Normal hair distribution [No **hair loss**]

Comment on: No **Scratch marks**

No **spider nevi**

No **gynecomastia** (Male) / breast atrophy (Female)

### Abdominal Exam

#### Inspection; Foot of the bed

**Contour** (Flat, Protuberant, Scaphoid) ~ abdomen might be filled with the 6F's  
+Symmetry

[

**Distended abdomen** in CLD due to **ascites**]

#### Inspection; Right side of the pt

No distended veins like **Caput medusae**

No **bruising**

#### Palpation and percussion

Dr nadia tips after finishing palpation;

-Start by examining organs, with each organ, palpate then percuss directly, and we do every one of them while asking pt to breath (Lead his respiration, ask to inhale and exhale)

-Orient your hands by keeping the fingers parallel to the rib cage

-Normal liver span is 6-12cm

-Spleen → Percuss it only on 9,10,11th ribs, it's dull and non-ballottable normally. During spleen's maneuver, after rolling the patient with your left hand, start from the umbilicus to save time.

Back to the steps!

## **LIVER; palpation**

Place your hand on RIF, parallel to rib cage, ask the patient to mouth-breathe, ask to inspire → push deep, ask to exhale → release, moving 1cm at a time until you get to either the liver edge or rib cage.

You have 2 choices,

if you found the edge, ask the patient to hold his hand on the point and comment; smooth, sharp, non tender liver edge

if you didn't, you'll have to percuss in upward direction afterwards.

## **LIVER; percussion**

Ask the patient to hold his breath after full expiration.

Starting from 2nd intercostal space, percuss downwards until the tone changes from resonant to dull indicating highest point of liver span

measure from this point to the other point the patient is holding (6-12cm is normal liver span) and comment on it's span and no hepatomegaly

(Percuss upward if u didn't feel liver edge, look for the point of tone change from tympanic to dull (no breathing required), measure..

## **Spleen; palpation**

Again, start from RIF and go diagonally 1 cm at a time, do same steps of liver including breathing, but here you'll 100% not feel the spleen as its normally impalpable

Ask the patient to roll towards you and hold him with your left hand

Restart palpating from the umbilicus region

## **Spleen; percussion**



Only percuss on 9,10,11th ribs mid axillary and comment on normal dullness, no palpable spleen.

## Ascites assessment

3 tests, 2 done, 1 mentioned

1- Shifting dullness;

Start below xiphisternum, percussing with fingers horizontal, and find a very loud tympanic percussion note to help you.

from that point, rotate finger to be vertical and start going laterally (towards you, for easier operation) until you find a dull spot

Ask the patient to roll while holding your hand (To his left side) (mention that you will wait 15 seconds but don't actually wait)

percuss again, it should still be dull normally

comment on no shifting dullness

2- Transmitted thrill

Ask the patient to put edge of his hand on the midline, place one of your hands flat on a side, and with the other one, flick a finger against its side, if you feel nothing on the flat hand; (DO IT BILATERALLY)

mention no transmitted thrill (Normal no ascites)

3- Mention succussional splash test; don't actually do it!!

## Auscultation

Auscultate over the liver, spleen

Mention hearing no friction rub over them

## Ending the station;

I will examine the **external genitalia (we do that to assess genitalia atrophy)**

I will examine **PR [Anorectal varices]**

**lower limb for edema, hair loss**

**sacral edema**

This is not a step but rather a small reminder that we assess hepatic encephalopathy using West Haven Criteria;

### West Haven for Hepatic Encephalopathy

Grade	Level of consciousness	Personality and intellect	Neurologic signs	Electroencephalogram (EEG)
0	Normal	Normal	None	None
Sub-clinical	Normal	Normal	Abnormal only on psychometric testing	None
1	Day/night sleep reversal, restlessness	Forgetfulness mild confusion, agitation, irritability	Tremor, apraxia, incoordination, impaired handwriting	Triphasic waves (5 Hz)
2	Lethargy, slowed response	Disorientation to time, loss of inhibition, inappropriate behavior	Asterixis, dysarthria, ataxia, hypoactive reflexes	Triphasic waves (5 Hz)
3	Somnolence, confusion	Disorientation to place, aggressive behavior	Asterixis, muscular rigidity, Babinski signs, hyperactive reflexes	Triphasic waves (5 Hz)
4	Coma	None	Decerebration	Delta/slow wave activity

Modified from Refs. 14,15

GOOD LUCK!!

# Thyroid complete physical exam (1.1)

## WIPPER and the intro

- Introduce yourself and shake hands
- Washing of hands and appropriate hand hygiene
- Asking for permission
- Ensuring the room's privacy
- Ensuring the environmental warmth and good lighting conditions
- Asking for appropriate exposure (The neck and the upper chest)
- Asking the patient to be in the appropriate position (Sitting)
- Relocating to the right side of the patient
- Asking for a chaperon
- "I have all of my equipment's"

## General look of the patient

- Consciousness, alertness and orientation** of the patient to time, place and person (After asking the 3 questions)
- Comment on the patient's position and **comfort~**
- Patient is **not in distress, tachypnea or in pain, not obese nor thin**
- Comment that the patient is showing **normal facial expression, no apathy or agitation**
- Comment on the patient's **normal clothing for the weather**
- Ask the patient to **say his full name**
- Comment on **normal speech with no hoarseness, no slow speech or pressure on speech**

## Vital signs

- Mention that you want to check the pulse as tachycardia AND a.fib occur with hyperthyroidism and bradycardia with hypothyroidism.
- Mention that you will have to check the blood pressure for diastolic/systolic HTN
- Mention that you will have to check the BMI for weight gain/loss
- you might be asked to mention the rest of the vitals; Temp, pain, RR, O2 saturation

## Hands

### Inspect for; palm and dorsum

- No palmar erythema
- No thenar/hypothenar muscle wasting
- No vitiligo
- Normal hair distribution
- No dry and course skin

### Nail changes;

- No finger clubbing
- No onycholysis
- No thyroid acropachy
- No brittle nails
- PALPATE**; check and comment on **hand's temperature, dryness/sweatiness**

### Tests;

- Ask the patient to extend his arms (يُمد ايديه)
- Comment on no fine tremor
- Do the carpal tunnel test! (You can find it ([Here](#)) in the mss checklist)

## Face

- No dry or course hair, no hair loss
- No hair loss of last third of eyebrows (*Hypothyroidism*)
- No periorbital puffiness or myxedema

- No lid retraction
- Ask the patient to look at your finger without moving his head, test for lid lag
- No lid lag
- No exophthalmos
- No proptosis
- No Conjunctival redness (Chemosis)
- Test for Ophthalmoplegia (H shape)!
- Comment on no diplopia, nystagmus ..

## Thyroid

### Inspection

- Ask the patient to hyperextend his neck, look at his thyroid
- No scars, swellings, skin lesions
- No asymmetry
- No visible dilated veins
- Ask the patient to swallow
- Mention that thyroid moves with swallowing
- Ask the patient to protrude his tongue
- Mention that thyroid doesn't move (*No thyroglossal cyst*)
- Ask the patient to raise his arms, notice any facial congestions (Pemberton's sign)
- Comment negative Pemberton's sign

### Palpation

- As always, do the steps before any palpation
- Stand behind the patient, ask him to slightly look down (Neck flexion)
- palpate :)
- Comment on symmetrical thyroid lobe

- Comment on no tenderness (Did you hold eye contact tho?!?!?!?)
- Comment on no nodules or masses
- Comment on no enlargement
- Feel for thrills, comment on no thrills
- Mention palpating cervical lymph nodes! (should be skipped)
- Ask the patient to swallow, comment on thyroid moves while swallowing
- Ask the patient to protrude his tongue, comment on no movement....

#### TRACHEAL TESTS!

- Using 3 fingers, check for tracheal deviation (comment that it's centralized)
- Ask the patient to take a deep inspiration, to check for tracheal tug
- Comment on no tracheal tug
- Measure the crico-sternal distance (Normally; 3 to 4 fingers)

## Percussion

- Percuss over the clavicle's head, note if there's dullness

dullness = Retrosternal goiter

- Comment on no dullness, normal resonance
- Percuss over the manubrium too, and comment no dullness, normal resonance

## Auscultation

- Auscultate for thyroid bruit
- Mention no thyroid bruit
- Auscultate for murmurs
- Mention no midsystolic murmur

## Finishing off your station!

I want to check/examine for;

- Proximal myopathy (Testing for it would be by asking the patient to stand up with his hands on his chest)

Mention - Testing for deep tendon reflexes (WHY?, in hypothyroidism = delayed relaxation, in hyperthyroidism = hyperreflexia)

Pretibial myxedema of grave's

Ankle swelling of heart failure.

Lower limb skin if its dry and course

:)

Untitled

# Complete Hand and wrist examination - Ahmad AlHurani (2.1)

Look, feel and move :)

## Wipper and vitals

- We do WIPPER
- Pt's exposure for mss is always one joint above, one joint below
- Pt's position is sitting upright with a pillow under his hands.
- We don't say abnormal until we compare right and left!
- Mention vitals (skip)

## Look;

Look at the palm, dorsum, lateral sides of the hands and in between fingers.

- No scars, skin rash, no bruises :)
- No **Color changes**; palmar erythema, **Raynaud's syndrome**,
- No **Nail changes**; nail pitting/brittle nails ...
- No **Deformities**; ~Swan neck / boutonnière/ mallet / Trigger finger / Sausage fingers / dupuytren's contractures (Alcoholid-CLD) / Z thumb (RA) / Ulnar deviation (RA)
- No **Skin nodules** ~ Bouchard's/Heberden's (Osteoarthritis)
- No **Gouty tophi**
- No **Visible soft tissue swelling**
- No **Muscle wasting** (thenar wasting in carpal tunnel syndrome)/ **hypertrophy** / **fasciculations**
- While looking at the hand's fingertips, mention **No Calcinosis** (Systemic Sclerosis)



Ask the patient to form a fist, mention **No loss of “Hill-Valley-Hill-Valley”** on the dorsal aspect of the hand (R.A)

## Feel

Palpate dorsum of the hand to check for temperature/dryness and sweatiness (comment)

**Pinch the skin** of the dorsal aspect of the hand, mention No thick nor tightening of the skin found (Scleroderma-Rodnan score) (Check the image at the end of this page)

Check all other joints for **soft tissue swelling and fluctuations** using your 2 thumbs (Wrist joint, MCP, PIP, DIP, don't forget the thumb's 2 joints!)

Squeeze test ~ squeeze all MCP joints for **tenderness**

## Move (All bilaterally)

Give the patient 2 fingers and ask him to squeeze to assess power of his hands

Comment on normal power

Ask the patient to move his wrist in all 4 directions to assess range of motion in his wrist

Comment on full range of motion

Ask the patient to move his thumb in all directions to assess its range of motion, and ask him to move it against resistance too.

Ask the patient to count their fingers (MCP joint flexion maneuver)

Test **flexor digitorum profundus** (isolate each finger, and ask to do flexion on **DIP** (extend pip)) and **flexor digitorum superficialis** (isolate each finger, and ask to do flexion on **PIP** (extend MCP)),

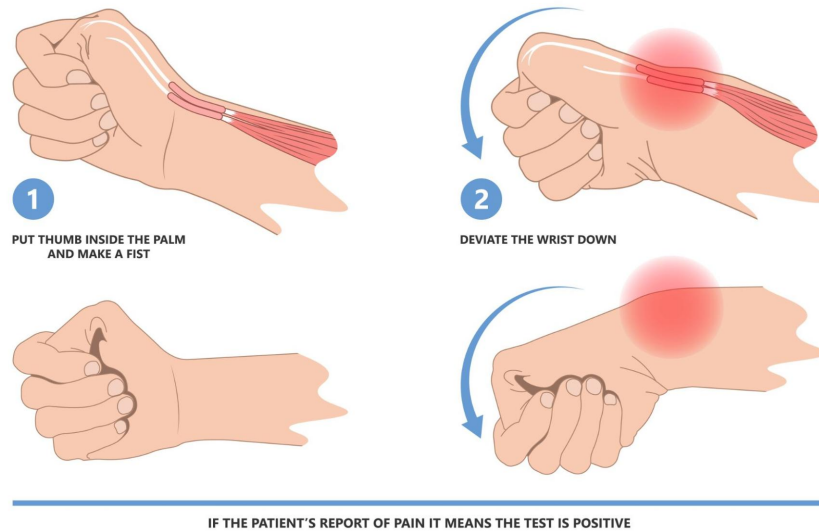
Again, make sure you isolate each finger's movement by stopping other fingers using your hands!!!

Ask the patient to form a semi fist and make sure his fingers point towards **scaphoid bone**

**Finkelstein's test**; ask the patient to make fist with thumb tucked inside, then ask him to do ulnar deviation. Positive test: pain above the radial side of the hand.

*De Quervain's tenosynovitis*

## FINKELSTEIN'S MANEUVER

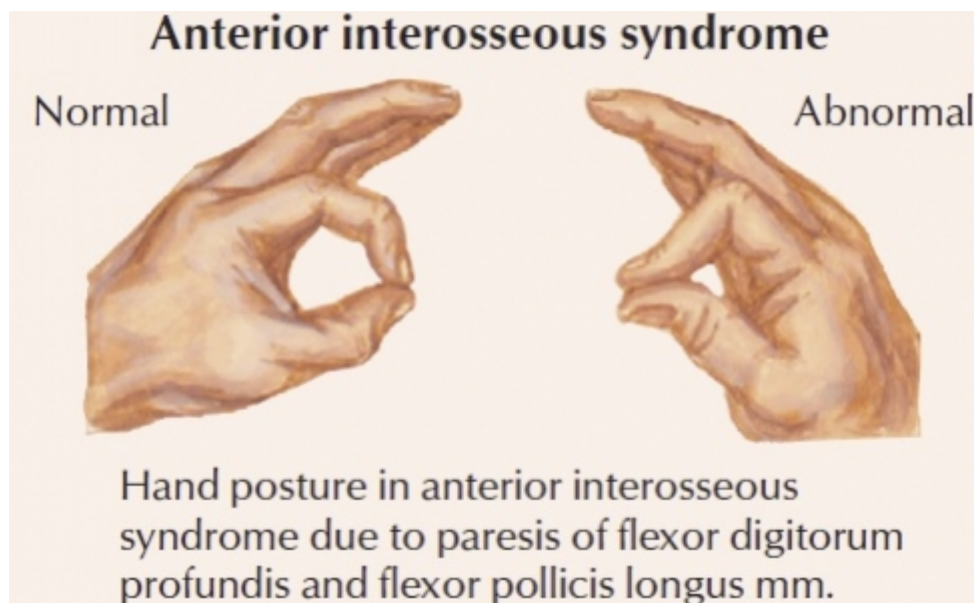


## Nerves

### Median nerve

For motor, ask the patient to do “Ok sign” this is only testing the anterior interosseous branch of median, that’s why we need a test for median proper, next step for that.

After patient does the “Ok sign”, assess its power by trying to pull on his ok sign after asking him to resist.



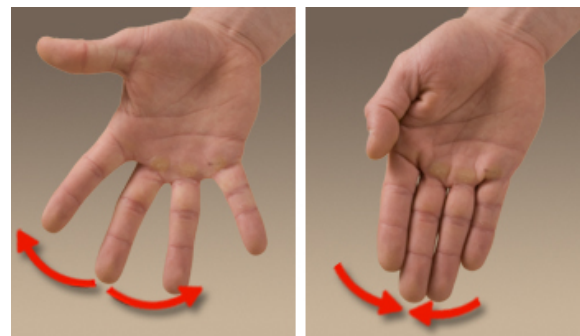
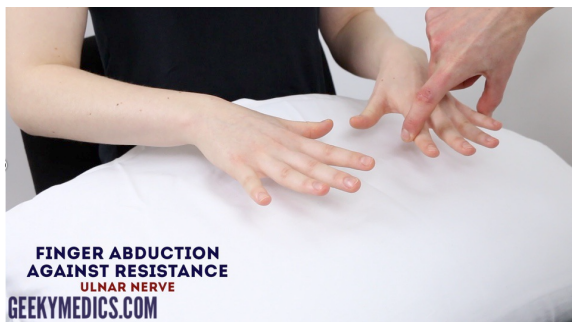
To test median nerve proper, we do opposition test of thumb (Oppose thumb and little finger)

For sensory, ask the pt to close his eyes, palpate thenar eminence and ask if patient felt it.

## Ulnar nerve

For motor, ask the patient to **abduct and adduct his fingers.(scissoring)**. Also, Adduction power can be assessed by putting a paper between patient's finger (Ask him to not let it go) and trying to pull it.

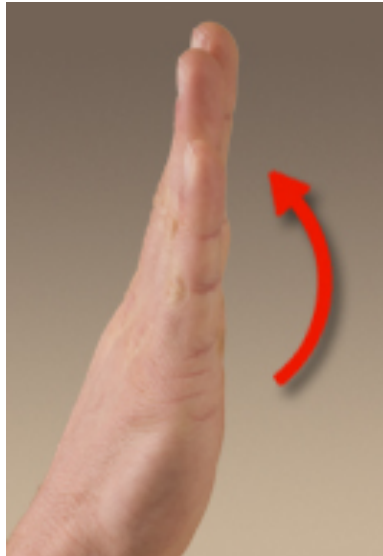
Abduction power can be assessed by:



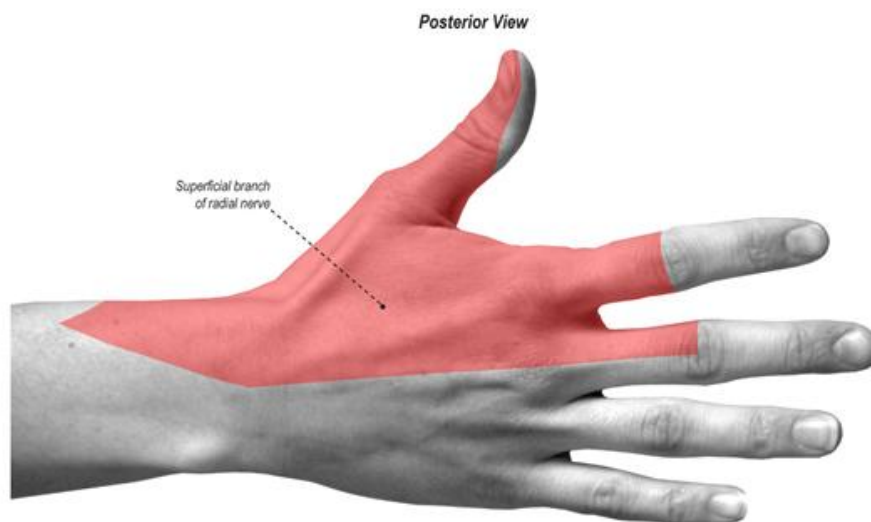
For sensory, ask the pt to close his eyes, palpate hypothenar eminence and ask if patient felt it

## Radial nerve

For **motor**, ask the patient to **extend his fingers at (MCP joint)** ask the patient to lay hand flat on a table, and raise only the fingers. (Then against resistance for power assessment)



For **sensory**, ask the pt to close his eyes, palpate dorsum of the hand on the lateral half.;



**Carpal tunnel syndrome** (2 test);

1)**Carpal Compression Test (most sensitive)**; compress with your thumb the position of the median nerve (Proximal to the distal hand crease) for 1 minute, this should (If the nerve is compressed) trigger the compression thus causing signs of carpal tunnel syndrome (Pain, Paresthesia and Numbness on the lateral 3.5 fingers) aka Durkan's test

2)**Tinel's test**; tap the position of the median nerve (Proximal to the distal hand crease) for 1 minute, this should (If the nerve is compressed) trigger the compression

thus causing signs of carpal tunnel syndrome (Pain, Paresthesia and Numbness on the lateral 3.5 fingers)



3) **Phalen's test**; (Reverse prayer) for 1 minute, a positive test again will produce symptoms of carpal tunnel syndrome (Pain, Paresthesia and Numbness on the lateral 3.5 fingers)..



End your exam by:

- Mention doing a neurovascular check
- Mention doing cap refill test
- Mention assessing radial pulse

# Cranial nerve examination checklist (1.0)

## Wipper and vitals

### Olfactory nerve examination (Useless)

- Check the nasal passage
- Ask the patient to close his eyes
- Close one nostril to test the other
- Ask the patient to smell (Use scratch and sniff test cards from (UPSIT))
- Close the other nostril and repeat.

### Optic nerve examination

#### Inspection

- Comment on no head tilt
- Comment on no facial asymmetry
- Comment on no proptosis
- Comment on no lid retraction
- Do lid lag test, stand up and ask the patient to follow your finger, move it up and back, bottom and back. AND COMMENT ON NO LID LAG

#### Palpation

- Warm and clean hands, ask for any pain, ask the patient to close one eye at a time, and gently palpate eyeball for tenderness.
- Comment on no tenderness

#### Let's begin the test; start by mentioning these tests;

- "I will assess visual acuity using Snellen's chart"
- "I will assess color vision using Ishihara plates"
- "I will assess macular sparing using Amsler's grid"

“I will do fundoscopy examination for things like optic disk examination, papilledema etc..”

### **Pupillary reflexes tests**

- I will dim the room and check the pupils' size for Anisocoria
- Ask the patient to fixate his eye on a distant point
- Get your torch, slide it horizontally to one eye, and notice “Direct” reflex, then slide it away and then to the eye again, while looking at the other eye notice “Indirect/consensual” reflex
- Comment on intact direct and indirect pupillary reflexes
- While patient is still fixating his eyes at that same distant point, put your finger ~ 15cm in front of him, and ask him to focus on it and notice “Convergence” and look for signs of accommodation.
- Comment on normal accommodation reflex

### **Visual field tests - Sit facing the patient 1 meter away.**

We'll start with homonymous visual field test and then sensory inattention, (Both eyes together)

- Ask the patient to look at your eyes.
- Hold 1 hand at its full extent, wiggle your fingers and ask if the patient was able to see the movement.
- Do that at 2, 4, 8 and 10 o'clock
- Comment no homonymous visual field defect.

### **Sensory inattention - This defect is rather related to the brain than to the eyes.**

- Ask the patient to look at your eyes.
- Hold both of your hands at their full extent, at 2 and 10 o'clock.
- Now begin by wiggling 1 hand at a time and ask if the patient was able to see them, the real test is when you wiggle both hands' fingers at the same time, a pt with sensory inattention won't be able to notice both, as his brain will neglect one side.
- Comment no sensory inattention

During the 3 next tests, we test **one eye at a time**, we ask the pt to close an eye, and we close the other (Pt's right, Dr's left..)



### **Peripheral visual fields**

- 1 eye closing maneuver..
- Ask the patient to look at your eyes.
- Test each quadrant (2,4,8,10 o'clock) separately with 1 hand, point it at its full extent, if the patient saw it wiggling then move to the next quadrant, if not start moving it to the center until the patient detects the wiggling, we're always comparing our vision field with the patient's.
- Test the other eye!!
- Comment no peripheral visual field defects

### **Color desaturation**

- Show a red object to the patient and make sure he sees it red.
- 1 eye closing maneuver..
- Put it directly in front of his open eye at a comfortable distance, ask the patient to notice the object's color.
- Test the other eye!!
- Ask if the patient notices different levels of red on each eye, if not, comment "No red desaturation"

### **Central visual field**

- 1 eye closing maneuver..
- Ask the patient to look at your eyes.
- Start moving the red object from one side towards the center, ask the patient to tell you when he first notices its color and not only its movement, compare that with your own central vision.
- Test the other eye!!
- Comment no central visual field defects

### **Blind spot**

- 1 eye closing maneuver..
- Ask the patient to look at your eyes.
- Hold the red object at the center, and start moving it horizontally until it disappears from your visual field/pt's visual field, compare both of your blind spots

- Test the other eye!!
- Comment on normal blind spot size/no blind spots at all (If the object wasn't small enough, it might not disappear to either you or the patient).

## Ocular movement nerves → 3rd, 4th and 6th

- At the same position, ask the patient to fix his head and only move his eyeballs following your finger.
- Draw the H shape we learnt about, notice the eye movement of the patient
- Ask about any diplopia, and if present; its features
- Comment on no nystagmus, no diplopia or blurred vision, full range of motion

## Trigeminal nerve;

- 4 things; Sensory, motor, jaw and corneal reflexes.

- For the **sensory part**, get a cotton-wool tip, make sure patient can feel it on their sternum, and then start testing light touch sensation on areas of V1, V2 and V3, bilaterally
- Repeat using neural tip to test superficial pain
- Mention; testing general sensation on anterior 2/3 of the tongue
- Comment on intact symmetrical sensation

### Motor

- Palpate and inspect temporalis muscle for muscle wasting
- Ask the patient to clench their teeth and check masseters for muscle wasting and bulk
- Ask the patient to open their mouth and inspect for any jaw deviation
- Comment on no muscle wasting, good bulk and no deviation of jaw

### Jaw reflex, Mentioning corneal reflex

- Ask the patient to relax the jaw to let their mouth slightly open, place your forefinger between the lower lip and chin.
- Percuss the finger with a tendon hammer and notice any reflex closing the jaw
- Comment on normal jaw reflex

- Mention testing for corneal reflex

## Facial nerve;

3 things; motor, taste, corneal reflex

### Motor part

- Ask the patient to raise their eyebrows, assess symmetry (*frontalis*)
- Comment about symmetrical wrinkles
- Ask the patient to forcefully close their eyes **against resistance** (Orbicularis Oculi)
- Comment about normal power of orbicularis oculi
- Ask the patient to “*Blow out your cheeks and don’t let me deflate them*”
- Comment on normal power of buccinator and orbicularis oris muscles.
- Ask the patient to show his teeth, (Smile)
- Comment on symmetry and no mouth angle deviation.

### Sensory part

- Test for touch sensation behind the ear
- Mention testing for “Taste sensation” on the anterior 2/3 of the tongue.
- Mention corneal reflex**
- (Not mentioned), ask about any changes in hearing -*stapedius muscle*

## Vestibulocochlear nerve;

3 tests, same order as this; 1) **Whispered voice** test, 2) Weber’s test 3) Rinne’s test

- Stand behind the patient, make sure he can hear you normally first.
- Close the other ear; Whisper at 60 cm, ask the patient to repeat the words. (If he could, that’s normal, now we skip to weber’s, if not; go 15cm)
- Close the other ear; Whisper at 15 cm, ask the patient to repeat the words.

**Weber’s test** (Positive test in x ear = pt hears louder on that ear compared to the other)

- Get your 512hz fork out, TAP IT, and put it’s base on the pt’s forehead’s midline.

- Ask the pt, “do you hear the sound the fork is making?”, “is it louder in any ear?”
- Comment on negative weber’s test. (No lateralization)

**Rinne’s test** (Positive test in x ear = air conduction is louder than bone conduction (NORMAL))

- Get your 512hz fork out, TAP IT, and put it’s base on the mastoid prominence behind pt’s ear
- Ask the patient to tell you once he stop hearing the sounds.
- Once he tells you this, place the vibrating ends of the fork near-in front of his ear, and ask if he now can hear the sounds.
- Comment on positive rinne’s test. (Air conduction is better than bone conduction)

## **Glossopharyngeal and Vagus nerves;**

- Ask the patient to talk, and mention no dysphonia, no dysarthria
- Ask the patient to say aah, and check the uvula
- Mention no deviation of the uvula
- Ask the patient to puff his cheeks and close his lips, listen for any nasal regurgitation
- Comment on no nasal regurge heard
- Do these 3 maneuvers; cough, gag, swallow.
- Ask the patient to cough and mention that it’s a normal cough, not weekend/bovine cough
- mention testing for gag reflex
- mention giving patient a cup of water to assess swallowing
- mention testing for “Taste sensation” in the posterior 1/3 of pt’s tongue.

## **Accessory nerve;**

SternoCleidoMastoid and trapezius

- Inspect SCM and trapezius
- Comment about no muscle wasting, no asymmetry in trapezius
- Palpate both muscles to assess their bulk

- Comment on their normal bulk
- Test the power of Trapezius by asking the patient to shrug their shoulders while applying resistance
- Comment on normal power of trapezius muscle
- Test the power of each SCM by asking the patient (testing rt.=) to turn his head to the left, and apply resistance to his motion
- Do it for the other SCM
- Now test bilateral SCM by asking the patient to look down and apply resistance on his chin
- Comment on normal power of SCM!

## **Hypoglossal nerve;**

- Ask the patient to open his mouth, look at his tongue
- Comment on no wasting, no fasciculation or abnormal movements
- Ask the patient to put out their tongue, look at the tongue's deviation
- Comment on no deviation, fasciculation or abnormal movements
- Ask the patient to quickly move his tongue from side to side
- Comment on normal movement of tongue
- Ask the patient to press his tongue to the inside of each cheek, try to push it from the outside to assess power
- Comment on normal power
- Assess the patient's speech by asking him to say words like "Yellow lorry"
- Comment on normal speech
- Mention testing the pt's swallowing

:)