History Taking Skills – WIIPP - ** = imp. Anything yes ask more

1- Introduce yourself:
Hello I'm ……. A 4th year medical student & I'm here to take some history today.

2- Take Permission assure privacy & Wash hands:
May I proceed? I assure you total privacy here & I'll call for a nurse to be present. ok, so I already washed my hands & wore my gloves.

3- Identity, Demographic Data: 6 things imp.
May I know your name, age, & where are from?, Are you married? If yes, ask how many children, what do you do for a living? + gender of patient. Example, Noura Muhammed Abdu, is 23-year-old female Saudi single and she is a medical student. (All in 1 sentence).

4- Presenting Complaints: How can I help you today? Or what brought you in today?

5- History of presenting complaints: any complaint the patient says ask more about it (usually shortness of breath, chest pain etc..). Pain (ex. chest pain) = SOCRATES
Site: Where is the pain? Could you point at it?
Onset: When did it start, sudden or gradual & for how long have you been experiencing it?
Character: How would you describe it, constant or comes & goes, sharp, dull, stabbing, throbbing?
Radiation: Does it radiates anywhere else? (Note: Rt. Shoulder= gallbladder, back= pancreatitis, legs= lumbar disc, around umbilicus to iliac fossa after 1h= appendicitis.)
Associated symptoms: Are there any other symptoms associated with it? (B symptoms for lymphoma are nightsweat, fever, weight loss. If yes, ask more).
Timing: How long does it last, is it constant or comes & goes?
Exacerbating & relieving factors: Does anything make it better or worse?
Severity: On a scale from 1 to 10 how severe is it? If 0 means no pain & 10 means the worst pain you've experienced?
Non-pain (ex. shortness of breath): OPERATES
Onset: When did it start, sudden or gradual & for how long have you been experiencing it?
Progression: how did it progress over time?
Exacerbating: Does anything make it worse?
Relieving factors: Does anything make it better?
Associated symptoms: Are there any other symptoms associated with it? (in chest pain: Cough, shortness of breath), (B symptoms for malignancy are nightsweat, fever, weight loss. If yes, ask more).
Timing: How long does it last, is it constant or comes & goes?
Episodes free of disease: have you been experiencing repeated episodes?
Severity: On a scale from 1 to 10 how severe is it? If 0 means no pain & 10 means the worst pain you've experienced?
Differentiate between shortness of breath (non-pain) & chest pain with shortness of breath as a symptom.

6- Accessory History:
- Past Medical History: Do you have any medical conditions? Like DM or HTN, thyroid disease, asthma? (diseases related to same system + others) any past admissions to the hospital, ICU, or blood transfusions? (If yes, ask more). When was the first episode?
- Surgical History: Have you ever undergone any operation or procedure like appendicitis, if yes when, and what it was?
- Trauma: Have you been in an accident or any type of trauma recently?
- Family History: Does anyone in your family has similar symptoms or common diseases in the family? Or sudden deaths? (If yes, ask more). (Family diseases related to same system + others)
- Allergies: Do you have any allergies?
  Before asking about the following tell the pt. **I'll ask you some sensitive questions is that ok?
- Drug History: Are you currently taking any prescribed medications or over-the-counter drugs? If yes, document name, dose, frequency, and why. (If pt. didn't remember know them from his old medical records or phone pic)
- Social History: Do you smoke? If yes, ask about how many packs a day + for how long? Do you drink alcohol? Did you travel recently? Do you exercise? (If yes, ask more). Female ask about pregnancy.

7- Systemic Review: 2-3 questions for each system is enough (choose from below), start from the top systems. Note. If the patient chief complaint is abdomen review everything EXCEPT the system of chief complaint. + if patient presented with chest pain you skip both Resp, CVS bc its related to both. Ask more about anything he says yes to.

By: Alanoud Alassaf

CNS= is there any visual disturbances like blurred vision, change in color vision or sudden loss of vision? Headache (if yes, do Socrates for headache), confusion, loss of consciousness, or dizziness?
ENT= is there any hearing loss or tinnitus, epistaxis, facial pain, dysphonia, or persistent nasal discharge, dryness of eyes, ulcers in mouth?
CVS= is there any chest pain, dyspnea, peripheral edema, or syncope?
RESP= is there any cough, sputum, wheeze, or dyspnea?
GIT= is there any change in your appetite, nausea, vomiting, abdominal pain or distention, weight loss, constipation, diarrhea?
Genitourinary= is there any burning sensation, difficulty during urination? Or blood in urine? For female vaginal discharge or bleeding, regularity of menstrual cycle?
MSK= is there any muscular bone or joint pain, or trauma?
Derma= is there any rash, skin lesions, skin color changes, or ulcers, itching?
Endocrine= do you tend to feel more cold or hot than usual, do you feel thirstier?
Psychological= do you have any hallucinations, or depression?
Heme-immune= bruising, or bleeding tendency?

8- Summarize what the patient has told you + ask if he has any concerns and thank him, and document in pt. files.
Summary, do you have any questions or concerns? Thank you, I will document it.

General Examination – WIIPP

ALWAYS for all systems in palpation + percussion WARM your hands first

1- Introduce yourself:
Hello I'm ……. A 4th year medical student & I'm here today for a general examination.

2- Take Permission (for each examination), assure privacy & Wash hands:
May I proceed? I assure you total privacy here & I'll call for a nurse to be present. ok, so I already washed my hands & wore my gloves.

3- Identity, Demographic Data: 6 things imp.
May I know your name, age, & where are from?
Are you married? If yes, ask how many children, what do you do for a living? + gender of patient.
Example, Noura Muhammed Abdu, is 23-year-old female Saudi single and she is a medical student. (All in 1 sentence).

4- Position & exposure:
Position and expose the part for each examination.

5- General assessment/ examination:
General appearance of patient:
First step (general look): is pt. looking well, pt. position, is he bleeding, cyanosis-jaundice, resp. distress symptoms (tachypnea, tachycardia, hypoxia, lip breathing, cyanosis).
Second step (more details): is he sweating, does he have any scars/ burns, is he connected to monitor, IV line, or catheter.
Your comment: mention what you see from the things mentioned above.

6- Vital signs: just mention them with the tools.
- BP recording: tool: sphygmomanometer, normal (120/80).
- Temperature: tool: thermometer, normal (36.5-37.5).
- Pulse: using 3 fingers measure the pulse of radial artery for 1 minute, normal (60-90). (Trick (not accurate) measure for 15sec then multiply by 4 or for 30sec then multiply by 2) Synchronization: used in heart auscultation and pulse examination to know the difference between upper & lower limb, and between 2 upper limbs: radio-radial, radio-femoral.
- Respiration (w/o patient noticing): RT (chest movement) per minute, normal (14-20), oxygen saturation by oximeter.
- Weight + height (BMI): normal, (18.5-24.9). $\frac{weight(KG)}{(height\ (m))^2}$

7- Face, Eye & mouth:
- Face: check for sweating, jaundice, hair loss, wounds, bleeding, tremor or twitching of eye.
  Your comment: no sweating, jaundice, hair loss, wounds, bleeding, tremor or twitching of eye.
- Oral cavity pigmentation and ulcers: (for personal hygiene)

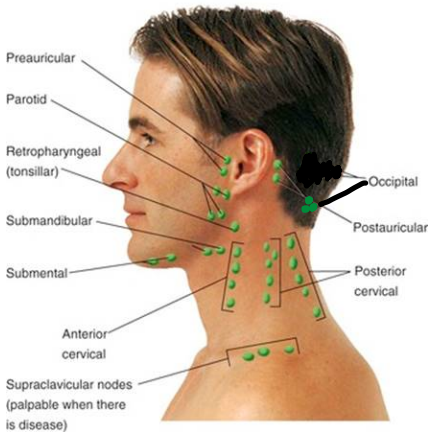
By: Alanoud Alassaf

Your comment: could you open your mouth please? then say no abnormal odor normal hygiene, no dehydration, no ulcers.

- Central cyanosis in tongue: (blue discoloration)
  Your comment: could you lift your tongue to the roof of your mouth please? Then say no central cyanosis, normal mouth mucosa & salivation, no discoloration in mucosa.
- Eye inspection: check for Lid lag, lid retraction, exophthalmos (how to test them is mentioned in thyroid checklist), xenophthalmias (sinking of eyeball). **Your comment:** no lid lag, lid retraction, etc…
- Jaundice in sclera: **Your comment:** could you look downward? while you hold the pt. upper eyelid to check. Then say no abnormal discoloration.
- Pallor in the conjunctiva: **Your comment**: could you look upward while you hold the pt. lower eyelid to check. Then say no pallor.
- Ears & nose:
  Your comment: is there any ear or nasal discharge? Any nose deformity, like septal deviation?
- Chest: check for gynecomastia, spider naevi. Then comment.
- Axilla: check for normal hair distribution, and if there is any discoloration. Then comment.
- Hands: check for flapping tremors, palmar erythema. Then comment.

8- Lymph nodes:

- Inspect the neck anteriorly:
  Your comment: could you swallow please? Then say no visible swelling or masses.
- Palpate the neck from the back: (you have to name them while palpating).
  All cervical groups, landmark is sternomastoid.
  1- Submental. 2- Submandibular. 3- preauricular. 4- postauricular. 5- occipital. 6- Ant. Cervical 7- Post. Cervical. 8- Supraclavicular. For ant. + post cervical ask the patient to turn his head to the left or right and palpate anterior and posterior to SCM muscle.
  Your comment: no palpable masses.



Geeky medics: https://youtu.be/SOACjGGAeTY?si=6M1p6rsDxEZhdHCO
Amboss: https://youtu.be/WSi42C9Nzv8?si=zF4m_3q8lPbmiVya

9- Lower Limb Edema: After exposure Press over bony prominence, stand on the Rt. Side of bed and face the patient with your eyes on the mid tibial shaft where you press (if dr. israa check on tibial shin 1st choice & best, dorsum of foot if dr. waqar, medial malleolus) for 20-30 seconds (or press until the color of your nail bed changes) and compare with the other leg at the same time. **Your comment**: no lower limb edema.
If pt. is bedridden, where do you check for edema? Sacrum of patient.

10- Tracheal palpation: as mentioned in thyroid examination.

11- Summarize what the patient has told you + ask if he has any concerns and thank him, and document in pt. files.
Summary, do you have any questions or concerns? Thank you, I will document it.

By: Alanoud Alassaf

Thyroid Gland (hypo + hyperthyroidism) - WIIPP

1- Introduce yourself:
Hello I'm ……. A 4th year medical student & I'm here today for a thyroid gland examination.

2- Take Permission (for each examination), assure privacy & Wash hands:
May I proceed? I assure you total privacy here & I'll call for a nurse to be present. ok, so I already washed my hands & wore my gloves.

3- Identity, Demographic Data: 6 things imp.
May I know your name, age, & where are from?
Are you married? If yes, ask how many children, what do you do for a living? + gender of patient.
Example, Noura Muhammed Abdu, is 23-year-old female Saudi single and she is a medical student. (All in 1 sentence).

4- Position & exposure:
Position patient sitting, expose neck & upper sternum.

5- Vital signs: BP, Pulse, Temp. are all affected. as mentioned above.

6- Inspection:

- General (inspect midline of neck): **Your comment:** could you swallow some water? Then say no scars, tattoos, discoloration, no dilated veins, or visible masses.
- Hands: Check for
  1- Dryness, sweating, and clubbing, palmar erythema. For clubbing ask pt. to place their 2 index finger nails together & check for a small diamond shaped window, if absent= clubbing. **Your comment:** no dryness, sweating etc…
  2- Peripheral/fine tremor: ask patient to stretch both hands and place a paper on top of them. **Your comment:** no peripheral/fine tremor.
  3- Radial pulse: mentioned above. **Your comment:** do as mentioned above then say normal radial pulse, regular rhythm.
  4- Collapsing pulse/ water hammer pulse. (geeky medics)
- Face: **Dry skin+ eyebrow loss:** associated with hypothyroidism. **Excessive sweating:** associated with hyperthyroidism.
  Your comment: no eyebrow hair loss, dryness, excessive sweating etc…
- Mouth: thyroglossal cyst: **Your comment:** could you protrude your tongue please? Then say no thyroglossal cyst. (Moves upward with swallowing or protrusion of tongue).
- Eyes: general appearance:
  1- Pallor, jaundice, tremor or twitching of eyes. (Mentioned above). **Your comment:** do as mentioned above then say no pallor jaundice etc….
  2- Exophthalmos by standing next to the pt. and observe if the eyeball is protruded & compare Rt. to Lt. **Your comment:** no exophthalmos.
  3- Lid lag: stand in front of pt. and ask him to follow your finger up and down(vertical). **Your comment:** could you please keep your head still & follow my finger? then say no lid lag.
  4- Lid retraction: **inspect the eyes** from the **front** and note if **sclera** is visible between the **upper lid margin** and the **corneal limbus.** **Your comment:** no lid retraction.
  5- Eye inflammation: check for dryness in conjunctiva, or conjunctival edema. **Your comment:** no conjunctival dryness or edema.
  6- Eye movement: **1.** Ask the patient to keep their head still and follow your finger with their eyes. **2.** Move your finger in an ("H" shape). **3.** Observe for restriction of eye movements and ask the patient to report any double vision or pain. **Your comment:** could you please keep your head still & follow my finger? Then say normal extraocular muscles, no ophthalmoplegia. Then ask, do you have double vision or pain?

7- Palpation:

1. Tracheal palpation 3 fingers method: place your index finger & ring fingers on the medial aspect of the clavicle, then place your middle finger on the trachea and check if centralized. **Your comment**: trachea is centered.
2. Stand behind the patient and ask them to tilt their chin slightly downwards.

By: Alanoud Alassaf

3. Fix 1 hand on the left thyroid lobe and palpate the right lobe by moving your right hand in small circular motion, and vice versa.

4. Place your distal phalangeal pads on the middle of the thyroid (midline of the neck) to check the thyroid's isthmus.

5. Ask the patient to swallow, whilst you feel for the symmetrical elevation of the thyroid lobes. **Your comment**: no palpable masses.

8- Percussion: to roll out retrosternal extension (goiter)
Your comment: I'm going to percuss over the manbrium sterni to check for retrosternal goiter.
Then place 3 fingers on it and percuss. Then say no abnormal dullness. (If resonant= no extension.)
Note: he might ask you how to check for retrosternal goiter extension or masses? By percussing manubrium sterni.

9- Auscultation of bruit: by the bell
Your comment: 1- take a deep breath and hold it in please. Then auscultate the first lobe with the bell of the stethoscope.
2- Could you exhale? (After finishing the first lobe). 3- take a deep breath and hold it again please. auscultate the other lobe. 4- Then auscultate the isthmus and bilateral to trachea on both sides. 5- say there is no bruit.

10- Then ask patient to expose their legs. **Your comment:** could you expose your legs please? no pretibial myxedema.

11- Finish by examining lymph nodes. (Mentioned above).

12- Summarize what the patient has told you + ask if he has any concerns and thank him, and document in pt. files.
Summary, do you have any questions or concerns? Thank you, I will document it.
Geeky medics: https://youtu.be/ziaYBkgEZNU?si=NCTOyvPAex09JApM
Amboss: https://youtu.be/Ed2WE7heOdU?si=4mY7jH-QUsRYcMm4

Neck Swelling (thyroid, LN) - WIIPP
most things mentioned above, the video is imp. To understand

1- Introduce yourself:
Hello I'm ……. A 4th year medical student & I'm here today to check for neck swelling & check your LN.

2- Take Permission (for each examination), assure privacy & Wash hands:
May I proceed? I assure you total privacy here & I'll call for a nurse to be present. ok, so I already washed my hands & wore my gloves.

3- Identity, Demographic Data: 6 things imp.
May I know your name, age, & where are from?
Are you married? If yes, ask how many children, what do you do for a living? + gender of patient.
Example, Noura Muhammed Abdu, is 23-year-old female Saudi single and she is a medical student. (All in 1 sentence).

4- Presenting Complaints & Position & exposure:
How can I help you today? Or what brought you in today? Position patient sitting, expose neck & upper sternum.

5- Inspection: in case of presence of mass

- Location of mass (just mention it).
- Size & shape.
- Moves with swallowing.
- Neck veins.
- Single or multiple.
- Skin changes, discharge, or sinus.
- Move with tongue protrusion.
- Inspect oral cavity and eyes.

6- Palpation: in case of presence of mass
1- Stand in front of patient: swelling tender or non-tender + tracheal position.
2- Stand behind patient:
- determine temp., number, consistency, and movement with swallowing and attachment.
- Pulsation and fluctuation. Mention it.
- Transillumination. Mention it.

3- Palpation of carotid pulse. 4- Massage one side at a time. 5- Palpation of lymph nodes.

7- Percussion: Over manubrium of sternum (mentioned above).

8- Auscultation: Over the swelling. Ask patient to hold his breath.

9- Summarize what the patient has told you + ask if he has any concerns and thank him, and document in pt. files.
Summary, do you have any questions or concerns? Thank you, I will document it.
Geeky Medics: https://youtu.be/TL5dnlefRnc?si=1_zNwRCy7jQonS7b

By: Alanoud Alassaf

Hands - WIIPP

1- Introduce yourself:
Hello I'm ……. A 4th year medical student & I'm here today to examine your hands.

2- Take Permission (for each examination), assure privacy & Wash hands:
May I proceed? I assure you total privacy here & I'll call for a nurse to be present. ok, so I already washed my hands & wore my gloves.

3- Identity, Demographic Data: 6 things imp.
May I know your name, age, & where are from?
Are you married? What do you do for a living? + gender of patient.
Example, Noura Muhammed Abdu, is 23-year-old female Saudi single and she is a medical student. (All in 1 sentence).

4- Position & exposure:
Position patient sitting, expose hands.

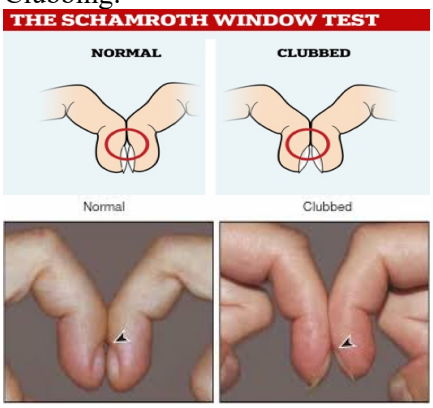
5- Inspection:

- Inspection of hands: **Your comment:** No tar staining. No osler nodes. No Janeway lesions.

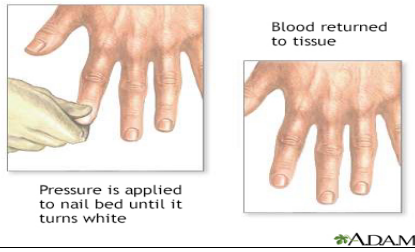
2-Inspection of nail changes: (clubbing, leukonychia, koilonychia)
For clubbing ask patient to stick 2 fingers together & check for the angle (normal= angle is present, clubbed= no angle)

Your comment:
No splinter hemorrhage or clubbing
No koilonychia
No leukonychia
Normal color
Do capillary refill time test if asked (normal 2 sec)

Clubbing:

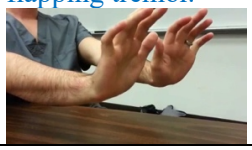


Capillary refill time:



6- Inspection of Peripheral cyanosis: check pt. hands then **Your comment:** no peripheral cyanosis.

7- Inspection of Flapping tremors: ask patient to stretch his arms and extend his palms. **Your comment:** no flapping tremor.



8- Summarize what the patient has told you + ask if he has any concerns and thank him, and document in pt. files.
Summary, do you have any questions or concerns? Thank you, I will document it.

Almost everything in hands examination is mentioned above, if not please look it up.

By: Alanoud Alassaf

Abdominal Examination – WIIPP - ** = imp.

1- Introduce yourself:
Hello I'm ……. A 4th year medical student & I'm here today for an abdominal examination.

2- Take Permission (for each examination), assure privacy & Wash hands:
May I proceed? I assure you total privacy here & I'll call for a nurse to be present. ok, so I already washed my hands & wore my gloves.

3- Identity, Demographic Data: 6 things imp.
May I know your name, age, & where are from?
Are you married? If yes, ask how many children, what do you do for a living? + gender of patient.
Example, Noura Muhammed Abdu, is 23-year-old female Saudi single and she is a medical student. (All in 1 sentence).

4- Position & exposure:
Position patient supine, exposure from nipple to mid-thigh but for patient privacy its ok to expose upper trunk only.

5- Vital signs: BP, Pulse, Temp. are all affected. as mentioned above.

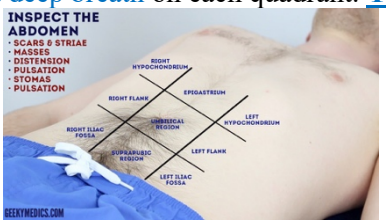
6- Inspection:

- Do general examination before inspection: you have to stand at the end of bed, in front of pt. feet.
  Symmetry, umbilicus, scars, venous dilatation, mass, shape, hair distribution, skin pigmentation, bulging masses on the side, striae (stretch marks).
- Check jaundice, pallor, hands & comment on them.
- Tell the patient to take a deep breath. **Your comment:** normal thoracoabdominal breathing.
- Then stand on the pt. right side and 1. Tell him to cough to check for hernia/bulging masses and inspect. 2. Tell him to roll on his side to inspect the back.
  Your comment: no hernia, no scars, no tattoos, no venous dilatation, no visible masses, no abdominal distention, no abdominal wall deformities, etc… + normal hair distribution.

7- Palpation (clockwise + keep your eyes on pt. to see his reaction): First ask the before starting patient if he has any pain, if he does then palpate starting from the area farthest from the area of pain. Because if you start palpating on the pain sit e the patient will get distracted and feel the pain everywhere.

2 Types of palpation:

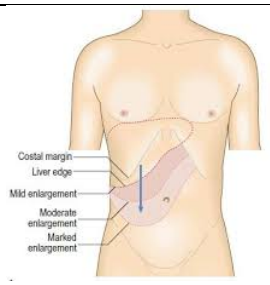
1- Superficial (to identify any superficial masses or tenderness): palpate all nine quadrants & the epigastrium lightly. **Your comment:** no superficial mass/tenderness.
2- Deep (to identify any deep masses or organomegaly): palpate all nine quadrants & the epigastrium more deeply, ask pt. to take a deep breath on each quadrant. **Your comment:** no deep palpable masses.



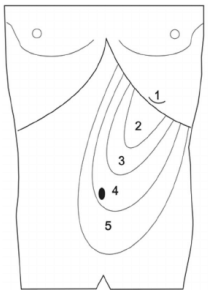
- If the examiner asked you to check for organomegaly you should do liver, spleen, kidney:

- **Liver Palpation: (normal in the rt. hypochondrium, when enlarged it will cover the whole rt. area that's why we start from rt. iliac upward): palpate from the right iliac fossa until the lower edge of liver.
  Your comment: normal, impalpable liver.

By: Alanoud Alassaf

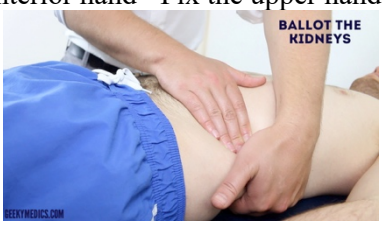


- **Spleen: start palpating from the right iliac fossa going obliquely till you reach the spleen area (left hypochondrium), ask the pt. to take a deep breath & hold it each time. **Your comment:** normal, impalpable spleen.



- Kidney: 2 techniques: (obvious in children, skinny people, kidney pathology)

1- Kidney ballottement: Keep your anterior hand steady in the deep palpation position in the right upper quadrant laterally. Attempt to ballot (push up) the kidney with the other hand in costophrenic angle. if the kidney was enlarged, it should be palpable by the anterior hand= Fix the upper hand, Push the lower hand.



2- Bimanual: Place one hand on top of the kidney and the other hand under the kidney (under the last rib), then press/push your hands together at the same time. **Your comment:** no palpable kidney.

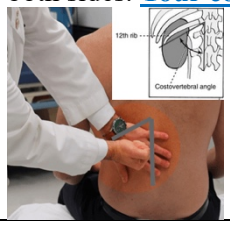
8- Percussion: If you were asked to percuss the abdomen you have to start by percussing the 9 areas.
   1- Liver: percuss upper border and span. The normal span is 8-10 in female and 10-12 in male.
   2- Spleen:
      Start percussion from the right iliac fossa going upwards to the ribs you ask the patient to turn and place your 3 fingers on the last 3 intercostal spaces and ask him to take a deep breath and percuss the 2nd finger will be dull **Your comment:** no abnormal dullness.
   3- Ascites: shifting dullness (mild) and fluid thrill (severe)
      If the examiner asked you to do "ascites examination" then you should do both shifting dullness and fluid thrill.

**Shifting dullness: for mild to moderate ascites. You start to percuss from the xiphisternum until the umbilicus and then when you reach the umbilicus you turn your hand so your elbow and fingers are facing the patient

then you percuss until you reach the end of the flanks keep your hand fixed and ask the patient to turn to their side wait 15 seconds until the fluid descends and visceral ascends then percuss again until the umbilicus.
Your comment: no shifting dullness.

- **Fluid thrill: for massive ascites. Ask the patient to put his hand in the midline (**why? To prevent transmission of fluid through the anterior abdominal wall). Place one hand on the patient's side. Flick the other side with your opposite hand. You shouldn't feel the wave. If you did feel it hitting your hand, there's ascites.
Your comment: no fluid thrill.

4- Costo-phrenic angle tenderness (kidney percussion): area of maximum tenderness in acute pyelonephritis Place one palm on the back of the patient under the last rib, make a fist with your other hand and hit the patients back on top of your first hand. If the patient felt any pain, he might have pyelonephritis. Do it on both sides. **Your comment:** no tenderness.

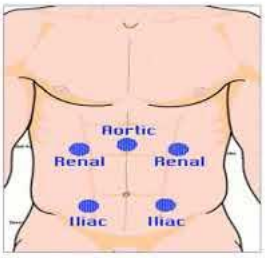


9- Palpate + percuss over the whole abdomen + liver + spleen + kidney.

- **Liver span: palpate from the right iliac fossa until the lower edge of the liver. Mark this point with a piece of tape. Then, percuss from the second intercostal space and continue downwards until it's dull. Mark this point with a piece of tape. Measure the distance between the 2 points with a ruler that will be the liver span.

10- Auscultation: (bowel sounds, arteries abnormalities)

- Bowel sounds (below umbilicus). Anesthesia for example affect the bowel movement=you'll be able hear it Listen to all nine quadrants of the abdomen.
Your comment: Audible bowel sound normal.
- Listen to the AORTIC artery (located in the middle of the abdomen above the umbilicus by 2-3 fingers) for bruit.
- The renal arteries: 2-3 fingers superior to the umbilicus and slightly lateral to the midline on left & right side.
- The iliac arteries: 2-3 fingers inferior and lateral to the umbilicus on left & right side.
Your comment: no bruit.
Bruits in renal a. stenosis, aortic dissection, coarctation of aorta, abdominal aortic dissection/ aneurysm



11- Finish by checking lower limb edema (mentioned above). If pt. bedridden= sacral edema.

12- PR examination or PR & PV for female:

- Check for prostate gland abnormality, sphincter tone, hemorrhoid.
Just mention it then say: I will finish my examination by doing PR examination in males, or PR & PV for female. (inspection, palpation, & if there is a mass percussion, auscultation)

Notes: if indicated pain, mass, swelling check for inguinal hernia, scrotal area in male, genital area in male/female.
PR examination 2 parts:

1- Superficial: inspection for any masses or any collection or any scars. Palpate for any masses or collections.
2- Digital rectal examination: tone for anal sphincter, stool color, tenderness.

13- Summarize what the patient has told you + ask if he has any concerns and thank him, and document in pt. files.
Summary, do you have any questions or concerns? Thank you, I will document it.
Geeky medics: https://youtu.be/PYAnF6GJY2I?si=MXfpF_sHHaA-aYMR
Amboss: https://youtu.be/Qnjo2mOxqwk?si=7sLMKXfIKKryVPI8

By: Alanoud Alassaf

RESP. Examination – WIIPP - ** = imp.

1- Introduce yourself:
Hello I'm ……. A 4th year medical student & I'm here today for a respiratory examination.

2- Take Permission (for each examination), assure privacy & Wash hands:
May I proceed? I assure you total privacy here & I'll call for a nurse to be present. ok, so I already washed my hands & wore my gloves.

3- Identity, Demographic Data: 6 things imp.
May I know your name, age, & where are from?
Are you married? If yes, ask how many children, what do you do for a living? + gender of patient.
Example, Noura Muhammed Abdu, is 23-year-old female Saudi single and she is a medical student. (All in 1 sentence).

4- Position & exposure:
Position patient sitting at 45 degrees or supine, expose chest.

5- Vital signs: BP, Pulse, Temp. are all affected. as mentioned above.

6- Do general examination before inspection: clubbing, peripheral/central cyanosis, respiratory distress (pt. can't lay supine using accessory muscles, lip breathing, tachycardia/tachypnea), pallor.
Vital signs: for tachycardia + tachypnea (measure RT, Pulse rate, and O2 saturation). Take them as mentioned above, then comment.

7- Inspection: in setting position + expose chest.
- Inspect shape, deformity (like barrel chest, pectus excavatum/carinatum, asymmetry), scars, and tattooing, hair distribution.
- Chest movement (resp. rate).
- Tracheal deviation during inspiration in inspection (in palpation 3 fingers method).
- Respiratory distress.
- Inspect chest anterior + posterior + sides (for history of trauma, history of chest tube insertion).
Your comment: please take a deep breath, then say normal breathing with equal chest movement, no use of accessory muscles, no devices attached to patient. No chest muscle deformities, no scars, no tattoos, no discoloration, and normal hair distribution. The patient doesn't look cachexic. The trachea doesn't look deviated.

8- Palpation: Front + back (pt. hug himself when examined from back)
- Trachea: 3 fingers method. Then **Your comment:** Trachea is centered.
- Cardiac apex: we go from the middle clavicle to the 5th intercostal space and palpate there. (Start counting from the sternal angle at the 2nd intercostal space then count down till you reach 5th intercostal space). **Your comment:** normal apex heartbeat.
- Chest expansion: chest expansion test (upper, middle, lower lobes) it will expand up to 5cm, anterior & posterior. Ask patient to take a breath for each one of them & compare. **Your comment:** equal bilateral chest expansion.

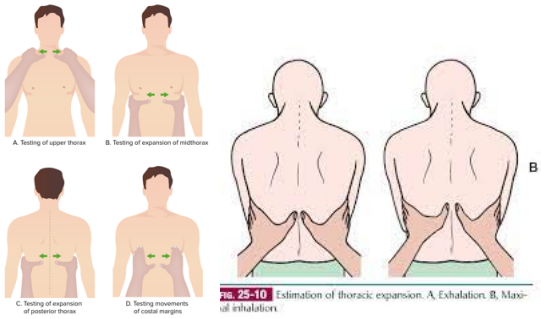
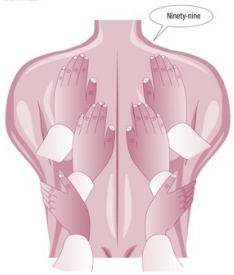


Fig. 25-10 Estimation of thoracic expansion. A, Exhalation. B, Maximal inhalation.

- Tactile fremitus: place your *palm on the pt. chest on 6 areas (upper, middle, lower), anterior & posterior (tell him to hug himself for posterior). Ask him to say "ninety-nine" **Your comment:** normal chest vibration.

By: Alanoud Alassaf

Figure I. Technique for assessing posterior tactile fremitus

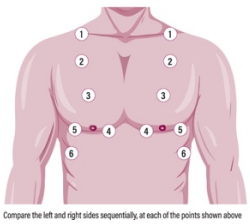


- Palpate the bones for any tenderness.

9- **Percussion: from one side to the other.

- Anterior: start from the supraclavicular area, compare Rt. To Lt. and then direct percussion over the middle clavicle directly. Then down over the intercostal space side to side (zig zag) till the apex then go to the 2 axillae.

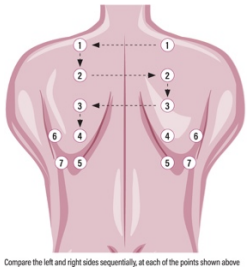
Figure 3. Anterior chest percussion and auscultation points



Compare the left and right sides sequentially, at each of the points shown above

- Posterior (ask pt. to hug himself): from the apex to the base side to side (paravertebral, zigzag).

Figure 4. Posterior chest percussion and auscultation points



Compare the left and right sides sequentially, at each of the points shown above

Your comment: there is no abnormal dullness. (We feel dullness in tumor, stony dullness in pleural effusion).

10- Auscultation: using the diaphragm we do it front + back

- Place the stethoscope on supra then infraclavicular then on each intercostal space on the midclavicular line, go down in a zig zag method, tell your pt. to take a deep breath slowly through the mouth each time your place your stethoscope. Don't forget the sides. For posterior (ask pt. to hug himself). (Same places as percussion put with the stethoscope + asking pt. to take a deep breath + we don't auscultate over clavicle)

  Your comment: bilateral equal airway entry with no added sounds. (Silent chest= pneumothorax)
- Tactile vocal resonance: "ninety-nine" but with a stethoscope. (Upper, middle, lower), anterior & posterior (ask pt. to hug himself for post.).

11- Posterior breath sounds: ask pt. to breathe deeply & should move from 1 side of the back across to other then down.
Anterior breath sounds: use stethoscope to listen to both sides of the front. Then progress from side to side moving downward using the same sequence while listening to one full respiration on each location.
Vocal resonance: while auscultating with the stethoscope over the back, ask the pt. to say 'e-e-e', you should move the stethoscope from 1 side to the other moving downward, while listening to the pt. say 'e-e-e' at each location. e-e-e with pneumonia.

12- Finish by checking lower limb edema (mentioned above).

13- Summarize what the patient has told you + ask if he has any concerns and thank him, and document in pt. files.
Summary, do you have any questions or concerns? Thank you, I will document it.

Geeky medics: https://youtu.be/gRWSyqatWQQ?si=UkzZtqH8XcBQld1m
Amboss: https://youtu.be/zdkYujPkeqo?si=wSJlxsPBvZ5kzoco

By: Alanoud Alassaf

Notes for Resp. + Abdomen from previous batches files (I didn't check if they are correct so, please do)

- To check for **acute appendicitis:** do rebound tenderness and Rovsing sign

Rebound tenderness: patient in supine position, press your hand on the McBurney point (in the right iliac fossa) and release suddenly, if he feels pain: positive rebound tenderness. Do the same procedure on the left iliac fossa. If he feels pain in the right side: positive Rovsing sign.

- To check for **acute cholecystitis:** Deep palpation while the patient is taking a deep breath . if the patient hold his breath --> positive murphy's sign

Murphy's sign: Patient in supine position. Place your left hand on the patient's right hypochondrium, push it into the right hypochondrium and hold. Ask the patient to take a deep breath. If Positive: The patient experiences pain/tenderness sufficient to cause an abrupt halt in Inspiration, he wouldn't be able to fully breath. (normally occurs toward the end of inspiration) and acute cholecystitis suspected, your comment: negative murphy's sign.

How to differentiate between liver or RT kidney?
- Liver moves with respiration
- Kidney no relation with respiartion.

precussion between RT kidney and liver?
- kidney is resonance
- Liver is dull

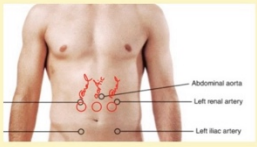
How to differentiate between spleen or RT kidney?
- Spleen moves with respiration
- Kidney no relation with respiartion.
- Do bimanual to make sure it is kidney

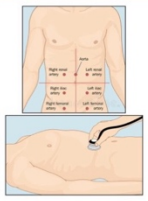
Position: supine
Exposure: nipple to the middle of the thigh we cover the genitalia.
Inspection:
- In the beginning we inspect at the end of the bed and we comment on the symmetry of the abdomen then we see the movement of the abdomen during respiartion and ask them take a deep breath. (Comment: normal thracoabdomen breathing, and abdomen looks symmetrical)
- If there's visible peristaltic waves —> pyloric sphincter obstruction.
- Then we go to the right side and comment on the flanks we at the level of the bed or abdomen (نزل راسك واللي ركبتك)
- Then we ask the patient to cough to check any hernia or bulging and after that resist my hand.
- Scar —> removal of kidney, liver transplants, C-section incision (pfannensitel incision)
- Medial scar —> laparotomy
- Kocher incision —> cholecystectomy
- Venus dilation —> capital Medusa due to portal hypertension.
- Dilated veins directed upward —> IVC obstruction
- Dilated venis directed downward —> SVC obstruction
- Mass if not normal —> red mass around the umbilicus is sister Mary joseph nodule it indictes GIT tumor.
- Shape of the abdomen (comment: no abdominal distention flat abdomen normally) abnormal in scaphoid abdomen (skinny, thin pt) or distended abdomen (Ascaites).
- Hair distribution—> high estrogen due to lung cancer
- Striations —> Cushing syndrome.
- But if in case normal we have to comment no visible mass and normal skin color.
- We see umbilical , the normal umbilical is inverted (the abnormal umbilical is smiling:obesity, ascites and everted:skinny) causes of everted umbilical is: massive ascaties, increase intrabdominal pressure.
- Stretch marks (striae): Silver —> pregnancy, purple —> Cushing.
- i compare the flanks if there's distended flanks we think about renal problems (kidney stones, polycystic kidney disease, UTI, ascaties)
- Types of hernia: 1. Femoral hernia 2. Inguinal (direct, indirect) 3. Incisional hernia.
- Wall deformities: diverticulum recti due to pregnancy
- Pigamenation —> Linea nigra during pregnancy
- Skin change —> acute pancreatitis sign grey turner sign.

Palpation:
- **WARM YOUR HANDS**
- superficial palpation: ask if there's any any pain and palpte far from the pain and look at the patient face.
- if doctor nada asked about deep palpation you palpate to liver and spleen ask patient to take a deep breath.
- In plapation of the liver same as the checklist we palpte in the epigastric region to assist the left lobe of the liver. (Comment: normally not palpable)
- **When the liver becomes down?** COPD, Pleural effusion
- If we do palpation to fluid we do the thrill. (why do we ask the patient to put his hands in the middle? To prevent transmission of fluid through the anterior abdominal wall)
- Kidney normally not palpable if palpable polycystic kidney disease.
- The other steps check the checklist.

Precussion:
- If she asked about precuss the fluid we do shifting dullnes.
- The remaining is the same as checklist.

Auscultate:
- when we don't hear bowel sound —> paralytic ileus
- We hear bruit —> renal artery stenosis
- Renal artery we hear it with the bell.





Respiratory examination notes:

Position: supine position (we have to mention that's Macleod information)
Exposure: upper trunk.
Inspection: we have to know every scar meaning e.g: Pneumectomy, chest tube in axilla (thoracentesis), don't say tattoos or trachea position in inspection.
- we see if there's any devices connect to the patient.
- We have to comment on type of breathing: 1) ThoracicAbdomen (normal)
- abnormal breathing causes: tachypnea, bradypnea.
- Causes of tachypnea: 1. Acidosis 2. Asthma 3. COPD 4. Anxiety.
- Causes of bradypnes: 1. Emphysema 2. Pulmonary edema.
- If the abdomen doesn't move what doesn't mean? Peritonitis
- Muscles of breathing: (accessory muscles):

inspiration muscles: (sternocloidmastoid, scalenes group, pectoralis minor/major)
expiration: (rectus abdomins, external oblique, internal oblique, transversue abdomins)
- No hair disterbtion means high esterogen level, lung cancer, chronic liver disease.
- Respiratory distress causes (no use of accessory muscles):

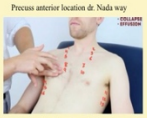
— lip breathing, cyanosis.
- When looking at patient to see the symmetry and type of breathing at the end of the bed and the other right side of the patient.
- Discoloration causes: 1. Slate gray discoloration due to —> Iron accumulation.
- The patient doesn't look cachexic (doesn't look skinny)

palpation:
- trachea in the beginning in the center middle finger we write I upward then we write V. (Comment: trachea center normal) abormal: retrosternal goitre, lung collapse.
- No need to palpate the cardiac apex if the trachea is center if the trachea deviated we do the cardiac apex.
- Chest expansion 3 places up,middle lower the upper one is different hand position (we pull the skin and make sure the thumb doesn't touch each other and thumb is up and ask the patient to take deep breath don't forget to do it posteriorly too) comment: equal bilateral chest expansion.
- Tactile fermits: same as lubd.

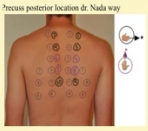
IMPORTANT: before doing any palpation + percussion we have to warm our hand (loses marks) - dr. Wagar.
Percussion: when we precuss first locate angle of Louis.
before the precussion we have to do the surface anatomy of the lung+heart, never percuss over the heart.
- Surface anatomy of the lung border: midcavilcular 6. Midaxaillary 8. Midparaveterbal 10.
- Apex of the lung where is it located? Above the first rib.
- first thing on the clavicle directly.
- Precussion normal sound is resonance abnormal dull+hyperresonance
- causes of the abnormality (dull): fluid, pleural effusion.
- Hyperresoance abnormality: pnemuthraox.
- Why we dont precuss over the heart? Cause the heart normally dull.
- Precussion posteriorly (ask him to hug himself) ——————————————>
- We stop precuss over rib N10 the end of lung border.

Auscultatory: same as lubd.
silent chest: pneumothorax.
Tactile vocal resonance: ask patient to say 99 while you auscultate (we should hear resonances)
We finish the examination with lower limb edema. (Press over the medial tibial shaft 20 seconds) causes: heart failure, liver+ kidney edema.
Bedridden: we check for sacral edema.

Precuss anterior location dr. Nada way



Precuss posterior location dr. Nada way



Abdominal examination

When doing superficial palpating you look for rigidity,guarding and temperature
Hepatomegaly causes: liver cirrhosis , malaria and right sided heart failure
Diverticulos recti can happen after pregnancy
Spica nevi is: small red to purple mark on skin caused by dilated blood vessels
Caput Medusae:swollen veins around the umbilicus
Mention the position of the umblicus,the hair distribution
Hernial orifices are: umblicus,paraumblicus.inguinal,epigastric and femoral
Dilated veins directed upwards because of IVC obstruction
Dilated veins directed downwards because of SVC obstruction
Visible peristaltic waves means pyloric sphincter obstruction
Pigmentations of abdomen:Turner grey sign and collie's sign they indicate acute pancreatitis
Stretch marks are called srtiae
Silver striae caused because of pregnancy
Purple striae caused because of Cushing
Know the dermatomes

Respiratory system

Abnormal Shape of the chest could be barrel chest,pigeon chest and pectus excavatum
Hyper resonance of chest percussion indicates:pneumothorax or COPD
Dilated veins on the chest indicates:SVC obstruction
Stony dullness found in pleural effusion
What is tracheal tug? Abnormal downward movement of the trachea
Where does the lung end? The anterior border extends from sternoclavicular joint to 6th costal cartilage. ????
Lung cancer causes abnormal hair distribution and gynecomastia due to high estrogen
Where does the middle lobe start and what is the land mark?
Inferior scapular angle correspond to which vertebrae?

By: Alanoud Alassaf

CVS Examination – WIIPP - ** = imp.

1- Introduce yourself:
Hello I'm ……. A 4th year medical student & I'm here today for a cardiac examination.

2- Take Permission (for each examination), assure privacy & Wash hands:
May I proceed? I assure you total privacy here & I'll call for a nurse to be present. ok, so I already washed my hands & wore my gloves.

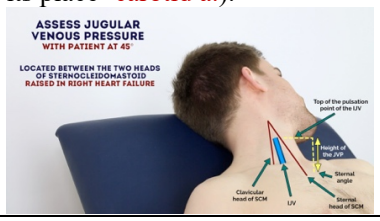
3- Identity, Demographic Data: 6 things imp.
May I know your name, age, & where are from?
Are you married? If yes, ask how many children, what do you do for a living? + gender of patient.
Example, Noura Muhammed Abdu, is 23-year-old female Saudi single and she is a medical student. (All in 1 sentence).

4- Position & exposure:
Position patient sitting at 45 degrees, expose chest.

5- Vital signs: BP, Pulse, Temp. are all affected. as mentioned above.

6- Do general examination before inspection imp.: **Your comment:** patient is sitting looking well not connected to IV line or to oxygen mask. Then check for central/ peripheral cyanosis, jaundice in conjunctiva, clubbing, collapsing pulse. Take them as mentioned above, then comment. Check for osler nodes, Janeway lesions in the palms + splinter hemorrhage in nail bed to exclude endocarditis. Vital signs: Pulse, BP, Oxygen saturation, RT, just mention them.
Fine Tremors: check it as mentioned above.
JVP: explain it, do it if asked. (You will need a ruler + a paper).

- Patient in 45 degrees position, ask him to turn his head to the left. The jugular vein should be visible not palpable + found in front of SCM muscle.
- For more confirmation: by hepato-jugular reflex, bring a piece of paper and a ruler, put the ruler perpendicular on the sternal angle.
- Apply deep palpation of the liver for at least 10sec & notice the raising of the vein and measure it with the ruler. Normal 3 or less.
- How to distinguish between carotid artery & jugular vein? 1- if you palpate & can feel it= carotid artery. 2- if you see it but can't feel it= jugular vein. 3- by hepato-jugular reflex (if pulsation rise up=JV, if it stays in its place=carotid a.).

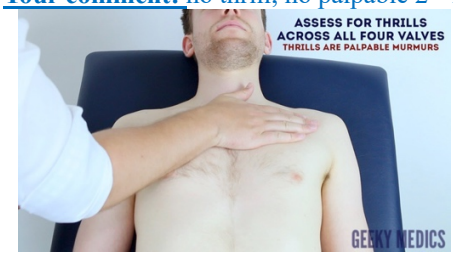


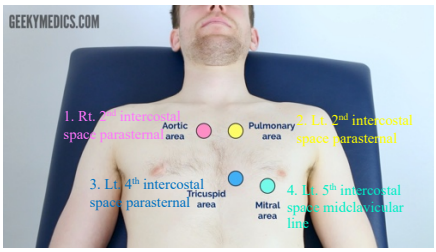
Precordial/local Examination:

7- Inspection: Deformity, scars, apex beat, and venous congestion. (Inspect anterior posterior, and lateral).
Your comment: no signs of previous surgery, no scars, no tattoos, no visible venous congestion, no visible apex beat.

8- Palpation: heart apex, trachea, left parasternal heave, palpable 2nd heart sound, thrill, palpate heart valves.

1- First palpate the apex beat with the palm of your hand on the midclavicular line in the 5th left intercostal space. If pt. is obese or beat wasn't clear tell him to roll on his left side. **Your comment:** say if its palpable or not palpable apex beat (if palpable mention if it's exaggerated or not).
2- Check tracheal position by 3 fingers method. **Your comment:** trachea is centered.
3- Place the side of your hand on the left of the sternum to palpate for heaves. **Your comment:** no left parasternal heave (if there is= Rt. ventricular hypertrophy). It's caused by the pressure on the heart from pulmonary HTN & Rt. side HF.
4- Palpate each of the 4 areas with the palm of your hand to assess for thrills (palpable murmur, could be due to aortic stenosis): then palpate the 2nd heart sound (pulmonary) by the palm of your hand to check if palpable or not.
Your comment: no thrill, no palpable 2nd heart sound.





*Palpate them in order

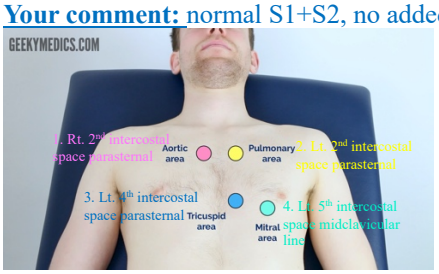
9- Percussion (limited): when to do? In case you suspect pericardial effusion.

By: Alanoud Alassaf

10- **Auscultation of the 4 areas (*be on the Rt. side of pt.): Aortic S2, pulmonary S2, tricuspid S1, mitral S1.

- Stethoscope on the valve location & your other hand on the radial, listen for 5-10sec. (start by the bell on mitral then diaphragm for others, make sure to SHOW the examiner).
- To check for **Mitral stenosis:** tell the patient to lay on his left side & put the diaphragm on mitral valve (apex).
- To check for **Aortic stenosis:** auscultate the carotid.

Your comment: normal S1+S2, no added sounds or Audible 1st + 2nd heart sounds, no added sounds.



*Auscultate in order + auscultate apex of heart by the bell (mitral).

If you were asked to do a pericardial examination= auscultate the heart.

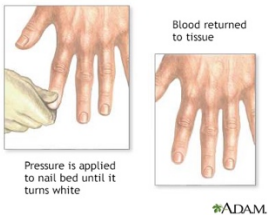
11- To be more accurate in palpation + auscultation use **synchronization**: while palpating/auscultating palpate the radial to see if there are any thrills. With the rhythm= S1, in between= S2.

12- Pulses: includes radial, dorsalis pedis, posterior tibial, carotids. When you check the pulse (usually done in general examination in the vital signs, won't be asked in CVS), pulsate the sites on the right + compare between Rt. + Lt. radio-radial, compare between upper + lower radio-femoral.

- Radio-radial
- Radio-femoral
- Radio-central (radial with carotid)
- Femoro-central (femoral with carotid)

2sec delay is normal. If more= abdominal aorta coarctation or common iliac artery coarctation.

Check the capillary refill time by pressing over any finger for 5-10sec. normal is 2-3sec.



- Abdominal Aorta: 2 fingers above umbilicus
- Carotid Artery: posterior to SCM muscle, but when you palpate, palpate anterior to SCM. Do one side then the other.
- Brachial Artery: cubital fossa, medial to biceps tendon.
- Radial Artery: medial or above the styloid process. Measure for 30sec ➡multiply by 2 (normal 60-90).
- Femoral Artery: midway below inguinal ligament. (Inguinal lig. b/w ASIS & pubis, you must say it, but you don't have to do it).
- Popliteal Artery: flex the knee & place 2 hands in the popliteal fossa b/w the 2 heads of gastrocnemius.
- Posterior Tibial Artery: behind the medial malleolus.
- Dorsalis Pedis: dorsum of foot b/w 1st & 2nd metatarsals lateral to hallucis longus tendon.

Compare everything on both sides.
Why we check pulse? To check for rate, rhythm, and character.

13- Finish by checking lower limb edema (mentioned above).

14- Summarize what the patient has told you + ask if he has any concerns and thank him, and document in pt. files.
Summary, do you have any questions or concerns? Thank you, I will document it.
Geeky medics: https://youtu.be/XU_xeUMJ3Zc?si=g4dtHF-xdaUnpMpO
Amboss: https://youtu.be/yLoxuhAD05M?si=knHYH5KzYSuHuVOw

CVS side notes from previous batches file:

Midline scar=open heart surgery.	Transverse over lateral side scar= Mitral valve replacement	Abnormal hair distribution= high estrogen levels due to lung cancer	Discoloration / S4 could be present in pregnant lady	Veins dilatation/congestion= SVC obstruction	Absent apex beat= obesity, pericardial effusion, severe HF

By: Alanoud Alassaf

CNS Examination – WIIPP - ** = imp.

1- Introduce yourself:
Hello I'm ……. A 4th year medical student & I'm here today to perform a neuro examination.

2- Take Permission (for each examination), assure privacy & Wash hands:
May I proceed? I assure you total privacy here & I'll call for a nurse to be present. ok, so I already washed my hands & wore my gloves.

3- Identity, Demographic Data: 6 things imp.
May I know your name, age, & where are from?
Are you married? If yes, ask how many children, what do you do for a living? + gender of patient.
Example, Noura Muhammed Abdu, is 23-year-old female Saudi single and she is a medical student. (All in 1 sentence).

4- Position & exposure:
Position patient sitting, expose chest.

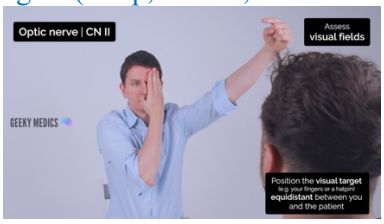
5- Vital signs: BP, Pulse, Temp. are all affected. as mentioned above.

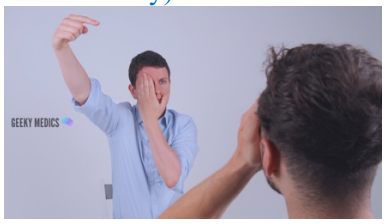
1- Mental Status:

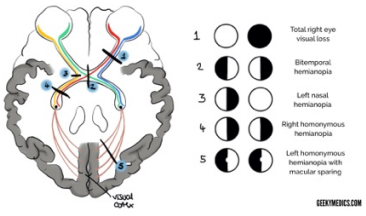
- Level of consciousness (assess by glows coma scale):
  Your comment: Patient is awake and alert.
- Orientation (person, place, time):
  Your comment: Do you know this person? Where are you now? Do you know what time is it? Day or night?
  Then comment: The patient is well oriented.
- Memory:
  - Short term:
    1. Recent: **Your comment:** what did you eat for dinner yesterday?
    2. Immediate: **Your comment:** I want you to remember 3 things and I'm going to ask you to say them again to me after a while (then mention any 3 things in the room: pen, light, table, door).
  - Long term: ask about something you and the patient know the answer to.
    Example: What is the name of the previous king? Or what major event happened at the end of 2019?
    Your comment: Normal short- & long-term memory.
- Speech: Just check for it during history. **Your comment:** Normal Speech.

2- Cranial Nerves: **III, IV, V, VI, VII imp.

- Olfactory (I):
  Your comment: Can you close your eyes and one nostril? Then bring out a known smell such as perfume, coffee. And say: can you smell it? Then do the same for the other nostril.
- Optic (II):
  - Visual acuity: (by Snellen chart and color vision by ishihara chart) or do it by fingers counting: lift 2 fingers and ask pt. how many finger I'm holding up? then lift 3 and ask again or any number of fingers.
  - Visual field**: sit in front of pt. ask him: can you close your left eye with your hand please? then you close your own right eye. Ask pt.: please look into my eyes and don't move your head, then proceed to by extending your arm up and hold up 2 fingers and flick them. ask the pt. : can you see my fingers? How many? Moving or fixed? Then lower your arms to the middle and ask again, then down and ask again (so up, middle, down in half a circle way). Then do it for the other eye, Then the fundi.







Your comment: normal visual field and I will assess the optic disc by fundoscope. (Just mention it for fundi).

  - Light reflex (direct + indirect):
    Put the side of your hand on the middle of pt. face, shine a light on the Rt. eye for example= pupil will be constricted on the same eye= direct reflex.

By: Alanoud Alassaf

The other pupil will constrict w/o the light= indirect reflex (consensual reflex).

- Accommodation reflex: bring a pin & put it away in the midline of pt. face then bring it back slowly toward the patient's nose. Observe the pupils, you should see constriction and convergence bilaterally.

Most likely you will just mention the light and accommodation reflex at the end of the examination by saying: I will end the examination by doing the light & the accommodation reflex.

- **Oculomotor (III), **Trochlear (IV), **Abducens (VI):

Extraocular movement: Examiner should be positioned in front of pt. and ask him to follow his finger or a pencil (H shape) without moving their head (observe for any nystagmus (which may suggest vestibular nerve pathology or stroke). Note: please remember the extraocular muscle that is responsible for each movement + the nerve supply. The oculomotor nerve supplies **all extraocular muscles except the superior oblique** (CNIV) and the **lateral rectus** (CNVI).

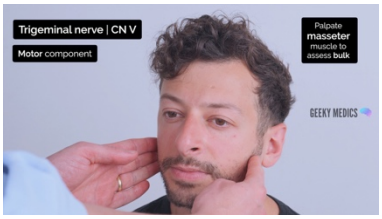
Actions of the extraocular muscles

- **Superior rectus:** primary action is elevation, secondary actions include adduction and medial rotation of the eyeball.
- **Inferior rectus:** primary action is depression, secondary actions include adduction and lateral rotation of the eyeball.
- **Medial rectus:** adduction of the eyeball.
- **Lateral rectus:** abduction of the eyeball.
- **Superior oblique:** depresses, abducts and medially rotates the eyeball.
- **Inferior oblique:** elevates, abducts and laterally rotates the eyeball.

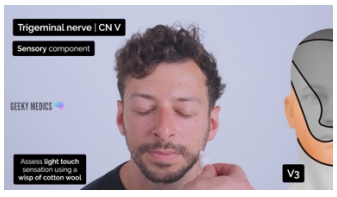
+ please remember the lesions.

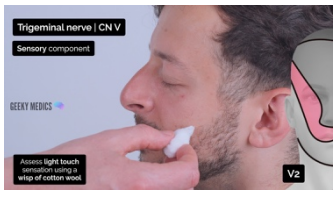
- **Trigeminal (V):

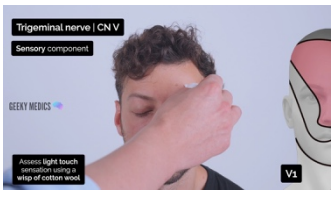
1. Clenching teeth while palpating the muscles of jaw. (Palpate the masseter & temporalis)
   Put your hand (3-4 fingers) on temporalis first then ask pt. to clench his teeth while you move your fingers slightly in a circular motion over the muscle then ask him to relax and move your fingers again then do the same for masseter.



2. Close pt. eyes & identify bilateral facial touch as soft or sharp for the 3 branches (ophthalmic, maxillary, and mandibular).
   First take a piece of tissue paper & place it over the pt. sternum or upper arm & explain to him that that's what he should feel (just touch don't scratch). Ask him to close his eyes then stroke the tissue over the pt. face on BOTH sides over each of the 3 divisions. Finish by doing the jaw and corneal reflex.

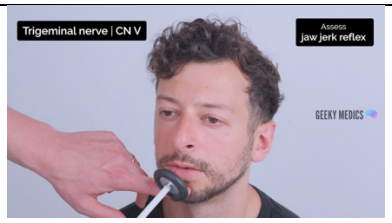






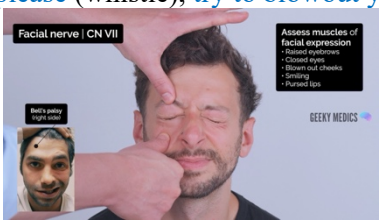
Jaw reflex: ask the pt. to lower his jaw (open slightly) then place your index finger horizontally across pt. chin and tap your finger gently with tendon hammer.
Check pt. reaction then say if there is hyporeflexia (doesn't react) or hypereflexia (close completely (UMNL)) or normal (trigger slight closure of mouth).

By: Alanoud Alassaf

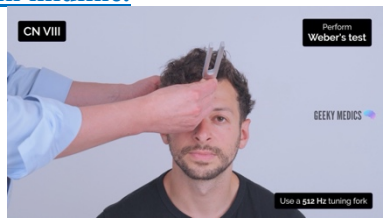


Corneal Reflex: Just mention it.

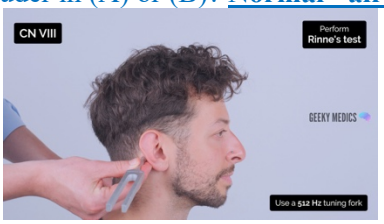
- **Facial (VII):
  1. Inspection of asymmetry in pt. face: note: the nasolabial folds & angle of mouth are especially indicative of facial asymmetry.
     Your comment: No atrophy
     No ptosis
     No drooling of saliva
     No drooping angle
     No abnormalities
     Normal blinking of the eye
  2. Contract muscle of expression: say: raise your eyebrows as far as they will go (wrinkle of forehead), close your eyes tightly and don't let me open them (try to open the pt. eyes) (eye closure), smile a big smile please (smile), try to whistle please (whistle), try to blowout your cheeks.

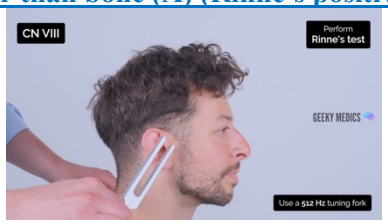


  3. Corneal Reflex: Just mention it.
  4. Sensory sensation (ant. 2/3 of tongue (taste)): by applying either/or salty, bitter, sour, sweet solutions on the tongue.
- Acoustic (VIII):
  Hearing the ticking of a watch, rubbing of fingers, or whispering next to the pt. ears and check if he can hear it.
  Rinne's and weber's tests:
  Weber's Test: explain the test, then strike the tuning fork, (test the fork on yourself first). Place the base of the fork in the midline of head, ask the patient: "do you hear the sound louder on your left ear or right ear or hear it in the middle? **Normal= sound heard in midline.**



  Rinne's Test: explain the test, then strike the tuning fork, place the vibration tips perpendicular about 1cm from the external auditory meatus for a few seconds (A). place the tuning fork base against the patient's mastoid process for 2-3 seconds and hold the patient's head still with your other hand (B). ask the patient in which position you hear louder in (A) or (B)? **Normal= air louder than bone (A) (Rinne's positive).**





Check the links below for better understanding.

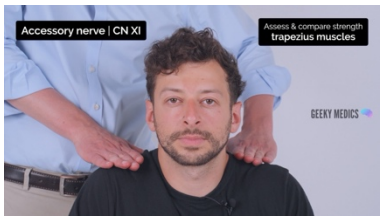
By: Alanoud Alassaf

❖ Glossopharyngeal (IX) & Vagus (X):
Check for gag reflex, uvula deviation (toward unaffected side).

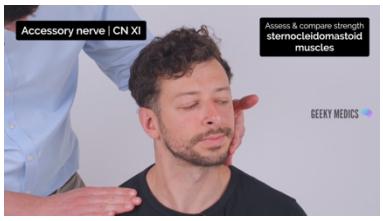
1. Ask the patient to open his mouth and press by a tongue depressor on the posterior pharynx + tell the pt. to say (Ahh) and see if the pt. will gag (absence= glossopharyngeal and vagus nerve pathology).
2. check if the uvula is central or deviated.
   Your comment: Nomal gag reflex, and uvula not deviated.

❖ Spinal Accessory (XI): motor to SCM muscle + trapezius.

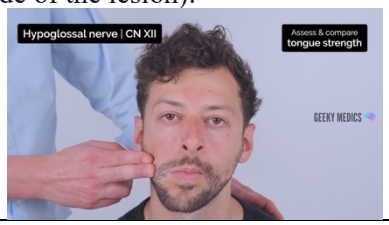
- Ask the patient to raise their shoulders and resist you pushing them downwards: this assesses the trapezius muscle (accessory nerve palsy will result in weakness).



- Ask the patient to turn their head left whilst you resist the movement and then repeat with the patient turning their head to the right: this assesses the sternocleidomastoid muscle (accessory nerve palsy will result in weakness).



❖ Hypoglossal (XII):
Ask the patient to protrude his tongue & move it from side to side (to check for deviation).
Put your hand on the patient's cheek and tell him to push your hand with his tongue. Do it on both sides (weakness would be present on the side of the lesion).



6- Notes from previous batches file: Qs: 1- causes of fixed dilated pupils? Atropine, optic nerve abnormalities. 2- causes of small irregular pupil? DM. 3- causes of pinpoint pupils? Pain killers/opioids, organophosphorus compounds, pontine hemorrhage, pilocarpine. 4- Muscles supplied by facial n? occipitofrontalis, orbicularis oculi, etc.. 5- branches of trigeminal n? temporal, zygomatic, buccal, mandibular, cervical. 6- what is crocodile tears syndrome and how it happens? Spontaneous tearing with normal salivation of eating happened after bell's palsy. 7- For testing the sensation, the reference point is sternum. 8- muscles of mastication supplied by trigeminal n. lateral pterygoid, masseter, temporalis. 9- abnormalities in trigeminal n? trigeminal neuralgia, neuritis, palsy, abrupt close of jaw in jaw reflex indicates brisk jaw. 10- Bell's palsy? Facial nerve.

7- Summarize what the patient has told you + ask if he has any concerns and thank him, and document in pt. files.
Summary, do you have any questions or concerns? Thank you, I will document it.
Geeky medics: https://youtu.be/yZ5kV7dJoZw?si=uGgIengIzd2KsNQL
Rinne's & weber's test: https://youtu.be/qYaU5Xo2i58?si=WAqe_Bv7mAsUiW3C

By: Alanoud Alassaf

3- Motor Examination

1- Inspection:

- Wasting
- Abnormal movement
- Deformities
- Fasciculation.

First expose the upper or lower limb

Inspection: **Your comment:** no ulcer, no scar, no tattoo normal hair distribution, no muscle wasting, no muscle atrophy. ask the patient to extend his arms in front of him and look for 30 second. **Your comment:** no fine tremor, no abnormal movement, no deformity, no fasciculation (tap by your fingers or by the hammer on a big muscle and wait for 20 sec, no twitching = normal).

2- Tone: passive movement of different joints

ask the patient to relax. Then move in a zigzag line comparing each joint to the other side. **Your comment:** normal tone.

Tone:

-upper limb: (sitting)

1- Carpometacarpal joint
2- Wrist: flexion extension and rotation movement then compare.
3- Elbow: flexion extension and compare.
4- Radioulnar: put the patient hand in 90 degrees (like shaking hands) move in pronation and supination and compare.
5- Shoulder in a circular motion while supporting the pt. elbow and compare.

- lower limb: (laying down)

1. Ankle: flexion extension and rotation movement and compare.
2. Knee: flexion and extension and compare.
3. Hip: flexion and extension then in a circular motion and compare.

3- Strength:

- Power grading (0-5). Ask patient to raise hands or legs.

Your Comment: normal strength.

- Active movement

Ask the patient to resist you.

Check for adduction, abduction, flexion, extension for each joint and compare with the other side. Don't forget to put a tissue paper between the patient's fingers and ask him to try to hold it in between them to test the metacarpal joints**. Your comment**: power is 5 for all joints.

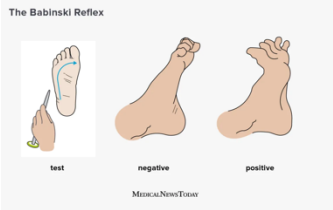
4- Reflexes (spinal or deep tendon):

Ask the patient to relax.

locate the tendon for every reflex first.

- movement of the hammer should be a rapid downward snap of the wrist. The hammer should not be held too firmly.
- Each of the following reflexes should be tested bilaterally.
- Biceps (strike over your finger), Triceps, Brachioradialis, Knee, Ankle (put the foot in a dorsiflexion position) and Planter (Babinski) do it if asked or at least mention it.

Your comment: normal reflexes.



By: Alanoud Alassaf

Coordination:

1- Upper extremities:

- The examiner should ask patient to touch examiner's index finger and patient's nose.
  The examiner should place his/her index finger 18 inches from the patient while changing the location of his/her finger several times. This procedure should be repeated with the Pt's other hand (finger-Nose-Finger).
- Rapid alternating movement.
  Ask the patient to repeatedly alternate his hand movement from supination to pronation over and over again, then do it faster. Do the same for the other hand.
  or
  The examiner should ask each finger on patient to rapidly and repeatedly touch his/- her thumb with the same hand. Repeat with the Pt's other hand.

2- Lower extremities:
Patient should be lying down Exposure: legs from knees down.

- The examiner should ask patient to run the heel of one foot up and down the shin of the opposite leg. Repeat with opposite leg (Heel to Shin).
- The examiner should ask patient to walk a straight line in a heel-to-toe fashion.

3- Romberg sign:
Examiner should observe patient stand with his/her arms stretched out in front or beside him/her with eyes closed.
Ask the patient to put his feet together before starting the test. Tell the patient to close his eyes.
Wait for some time while the patient's eyes are closed and guard him with your hands from the front and the back.

4- Gait: the examiner should observe patient walk, turn, and return. On the heels then on the toes.

5- Notes from previous batches file: Root values: ankle jerk S1, S2, knee jerk L3, L4, Biceps reflex C5, C6, Triceps C6, C7. Positive Babinski sign & hyperactive reflexes= UMNL. Common peroneal nerve injury causes: foot drop

4- Sensory Function:

Compare 2 sides & patient should close his eyes.

- Superficial:
  - Touch
  - Pinprick
  - Pressure

Temperature: by 2 test tubes 1 hot & the other cold. Stroke each tube individually over each dermatome. Ask pt. what he feels on each dermatome.

- Deep sensation:
  1- Position sense:
  The examiner should hold either side or the tip of patient's finger then move the finger up or down & ask the pt. to say which way its being moved. Then repeat with big toe.
  2- Vibration sense:
  The examiner should place a vibrating tuning fork against the bony prominence of the patient's wrist (styloid process) & ankle (medial malleolus) & ask the patient to state when the vibration stops.
  3- Cortical sensation: stereognosis, graphesthesia.
  Ask pt. to close his eyes. Stereognosis: put a key in his hand & ask him what is this?
  Graphesthesia: write a number or letter on his palm & ask him what it is.

Geeky medics: Upper limb motor & sensory: https://youtu.be/4uAAjYzi7SY?si=MnDxZ2manfSPLT_I
Lower limb motor & sensory: https://youtu.be/IdmQSVZN05I?si=DF4M_T-jfcWQ6GBp

Goodluck. Please remember to cut your nails + ask pt. if there is pain before you touch him + your attitude (loud sound, they may try to provoke you & see your attitude) + warm your hands + don't put the stethoscope around your neck (you will lose marks)****

By: Alanoud Alassaf