

General

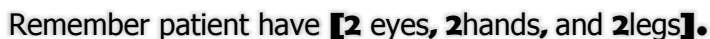
Examination

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- Parts should examine in general examination:-**

- After you finish examination → cover & thanks for patient.
- Comment about you're finding with confidence.



VITAL SIGNS:-

A- pulse:-

I- RATE: - [60-99 beat/min]

D/D:-

Tachycardia > 99	Bradycardia < 60
1-anxiety	1-sinus Bradycardia
2-fever⇒each 1 degree⇒↑10 beat	2-MI
3-anemia	3-hypothermia.
4-H.F	4-hypothyroidism⇒↓T3, T4
5-thyrotoxicosis ⇒↑T3.T4.	5-cholestatic jaundice.
6-pheochromocytoma.	6-↑ ICP.
7-drugs ⇒ e.g.:- bronchodilators	7-drugs:-e.g. [β-blockers, digoxin, verapamil].

N.B:-Bradycardia it is may be normal in athletes at rest.

2)- irregular rhythm a)- regular irregular⇒digital toxicity
b)- irregular irregular.

Techy arrhythmia causes**Brady arrhythmia causes**

1) - regular irregular (vent extrasystol, vent tachycardia)

1- Sick sinus syndrome.

2) - irregular irregular (atrial fibrillation, vent fibrillation).

2- carotid sinus hyper sensitivity.

3- 2 o degree heart block.

III-VOLUME:-

1) - good $\Rightarrow$ normal

2) - (hyper kinetic) $\Rightarrow$ large volume $\Rightarrow$ abnormal (same as collapsing pulse).

3) - (hypo kinetic) $\Rightarrow$ small volume

large volume	small volume
A.R	A.S
PDA	M.S
anemia	H.F
sever thyrotoxicosis	hypovolemia
pregnancy	
Paget's disease	

Note:-

Pulse pressure = systolic pressure- diastolic pressure.

character:- special charalter are:-

1) -collapsing pulse = water hummer pulse = Corrigan pulse = bounding pulse

EX:- AR, PDA, fever, anemia ,thyrotoxicosis

MR, VSD, athletic, beriberi, A-V fistula , Paget , pregnancy.

any case of hyperdynamic circulation

2) -bisferience pulse :- 2peaks felt in 1 systol.

2 systolic peak = two systolic impulses, occurs in AR+AS at same time present.

3) -diacrotic pulse:- 2 peaks, the first in systole & 2nd during diastole. e.g. congestive cardiomyopathy.

4) -slow rising pulse = pulses parvus = pulses trades =anacrotic pulse=plateau pulse slow upstroke e.g. AS

5) -jerky pulse $\Rightarrow$ **[HOCM]**.

6) -pulsus alternans $\Rightarrow$ regular alternation one pulse strong and other weak $\Rightarrow$ **[in sever L.V dysfunction]**.

7) -pulsus paradoxes:- fall in systolic BP >10 mmhg after inspiration.

8) -pulsus bigeminy, trigeminy $\Rightarrow$ digoxin toxicity as noticed before.

SYNCHONICITY:-done by compression at same time Lt & Rt radial arteries: normally palpable at one time

D/D of asynchronous pulse:-

outside wall	Wall	inside wall
cervical rib	Arteritis e.g. Takayasu, giant cell Arteritis, syphilis.	Thrombus.
thoracic out let syndrome	Atherosclerosis.	
pancast tumor	Aortic dissection. Trauma or surgery.	

NOTE:-1)-radio femoral delay $\Rightarrow$ coaction of aorta.

2)-arterial wall thick like cord $\Rightarrow$ arteriosclerosis.

B)-blood pressure:-

1)- [130-139/85-89 $\Rightarrow$ normal]

2)- 140/90 $\Rightarrow$ HTN.

NOTE:-✱-normally:-L.L. BP > U.L. BP

✱-BP measure in both arms& comment how you measured diastolic bp

Ideal measurement of BP:- before measure BP should be ensuring the pt. relax, not smoked, not taken caffeine or exercise in last 30mintes $\Rightarrow$ B/C all of this $\Rightarrow$ ↑ bp transient.

the cuff should be suitable size B/C large cuff $\Rightarrow$ false ↓

small cuff $\Rightarrow$ false ↑

NOTE:-if pt. Complain from dizziness $\Rightarrow$ measure BP on standing.

BP on standing $\Rightarrow$ normally systolic> 10-15mmhg

diastolic>5mmhg

postural hypotension :- when systolic drop 20-30mmhg.

C)-respiratory rate:-

(12-21) cycle / min or breath / min

female $\Rightarrow$ count chest movement.

male $\Rightarrow$ count abdominal movement.

Tachypnea $\Rightarrow$ rapid shallow breathing rr>21/min.

Bradypnea $\Rightarrow$ decrease rate<12/min.

Apnea $\Rightarrow$ cessation of aire way>10sec.

Hypopnea $\Rightarrow$ hypoventilation $\Rightarrow$ 50% in depth& rate>10sec.

Hyperpnoea $\Rightarrow$ hyperventilation depth& rate.

D)-temperature:- 36.7 - 37.6 C°

Site ⇒ **1)**-mouth **2)**-rectal **3)**- axillary.

Note: - <35 ⇒ hypothermia.

>37.6c ⇒ fever

You must note from which site you measured temp.

types of fever	types of breathing
continuous:- slight diurnal variation[0.5-1c]	1-abdominothoracic ⇒ male& child
Intermittent: - & to normal each day.	2-thoracoabdominal ⇒female
Remittent fever daily & [>2c] but never to normal level.	3-exclusively thoracic ⇒ abdominal pain
Relapsing:- temp return to normal for days before rising again.	4-exclusively abdominal ⇒ chest pain.
Pel-ebstein fever: - as relapsing but temp may subnormal.	5-paradoxical breathing:- diaphragmatic paralysis.
	6-cheyne stokes breathing:-apnea then hyperapnea.
	7-ataxic breathing medulla damage.
	8-kussmanl breathing ⇒ DKA,CRF
	9-apneustic breathing pontine hge.

General look:-

1. Appearance ⇒ healthy [well, ill].
2. mental state ⇒ oriented or confused
3. Cooperative or not.
4. built [underweight , average, over weight]

If ↑ weight:- 1)-fat=obesity.

2)-Edema.

5. skin color:- [blue, yellow, pallor, plethoric, Pigmentary, discoloration]

any [cannula, dressing, catheter, nebulizer, infusion pump, IV fluid, wheel chair, walking stick, drugs]

Comment about it.

e.g.:-Mr.⇒lying on bed he/she look ill confused cooperative, underweight, he has cannula in his left surface in dorsum hand it is connected to infusion pump.

There is face mask connected to oxygen slender & vital signs are:-

Pulse⇒beat/min, **R.R**⇒cycle/min, **Temp**⇒measured at Rt axilla, **BP** was⇒diastolic measure on disappearance of sound.

N.B:-if you observe some specific sign to make spot diagnosis like [Cushinoid, acromegaly, Addison, thyrotoxicosis....etc] you have to note it from starting.

E.g.:- from up to downward:-

☼ **Head** ⇒ [face, hair, eyes, mouth & pharynx].

☼ **Face:-**

Symmetry ⇒ asymmetrical [facial, palsy]

Color or rash:-

1)-malar flush:- [MS, myxedema, SLE].

2)-plethora ⇒ polycythemia.

3)-rashes ⇒ butterfly ⇒ SLE

⇒ heliotrope ⇒ [Dermatomyositis].

⇒ Telangiectasia ⇒ systemic sclerosis.

⇒ Acne.

Look for any sign of endocrinal disorder like:-

1- staring look + exophthalmos ⇒ thyroid diseases.

2- prominent forehead + prognathism ⇒ acromegaly.

3- round moon face + plethoric, hirsutism, acne ⇒ Cushing.

Other sign to make clue d/d as:-

1- Mask face ⇒ parkinsonism.

2- Smooth, shiny, tight skin, peaked nose, small mouth, thin lips, telangiectasia ⇒ systemic sclerosis.

3- Congested face + edema ⇒ SVC obstruction.

4- Edema especially around eyes ⇒ nephrotic.

Parotid gland swelling:- **1)-**mumps. **2)-** salivary duct occlusion. **3)-** sialidosis.

4)- lymphoma. **5)-** leukemia. **6)-** alcohol intake.

Unilateral ptosis & congested face ⇒ clue about apical lung ca.

EYES

➤ Yellowish of upper part of not lower?

➤ Why sclera not conjunctiva?

➤ Pallor of conjunctiva ⇒ anemia.

Note:-when you look for jaundice ask pt. to turn toward day light.

-if pt. have red eye due to conjunctivitis ⇒ can't use conjunctiva for sign of anemia.

Comment:-

face is symmetrical there is no rash there is no yellowish discoloration of sclera & conjunctiva look red in color & both pupils are equal in size & react to light.

Mouth & Pharynx

Torch & tongue depressor should use:-

Lips: - look for [pigmentation, cyanosis, eruption, dryness angular stomatitis].

ASK pt. to open his mouth:-

- 1)-breath odor
- 2)-ulcers:- inner surface of lips and hard palate.
- 3)-color:- blue, pale, yellow.
- 4)-hydration.
- 5)- smoothness⇒anemia⇒(iron ⇒painless , vit b12 ⇒ painful)
- 6)-look for teeth & gum hygiene& ask about artificial teeth.

Note: - ask patient to say AAA ⇒ look to movement of soft palate & tonsils ⇒if hyperemia or pus.

NECK:-

- **Good exposure & good position:-** 1)- patient. 2)-doctor.
- **Look for:-** 1)-L.N 2)-thyroid 3)-trachea 4)-JVP.

Inspection:- symmetry, scar, dilated veins, sinus with or without discharge, redness over laying skin.

Palpation: - 1)-L.N. 2)-thyroid. 3)-trachea. 4)-JVP measurement.

L.N:- palpate all cervical groups as following:- 1)-sub mental. 2) - submandibular.
 3)-anterior cervical. 4) - pre oracular
 5)-supraclavicular [Virchow's]. 6) - posterior cervical.
 7)-post oracular. 8) - occipital.

NOTE:-

If you feel L.N you should examine axillary, inguinal, epitrochlear, popliteal & palpate liver & spleen.

After palpation:- describe about [tender or not, bilateral or unilateral, symmetrical or asymmetrical, site, size, consistency, attached to skin or underline structure.

Note: - about trachea is centralized or not.

comment :-e.g.:-the neck is symmetrical there is no obvious swelling or mass no dilated veins no scar & there is no detected mass by palpation central or peripherally of neck & JVP is ⇒cm & trachea centralized.

*Alamdar normally 40-8 cm
BP:- 6-8 mm*

Upper limbs:-	Lower Limbs:-
1 - Nails clubbing.	inspection:-
2 - Pallor or bluish.	【Swelling, scar, dilated veins, cautery mark, scratch mark, inter-digital infection, ulcer, atrophy of MS, loss of hair】.
3 - Koilonychias (spoon shaped nail).	palpation:-
4 - Leuconychia [white nail].	1. Is edema putting or not.
5 - Splinter hge [extravasation of blood].	2. Peripheral pulses.
6 - Onycholysis separation of nail from nail bed.	3. temperature, tenderness in calf Ms.
7 - Palms $\Rightarrow$ erythema.	
8 - Pallor creases $\Rightarrow$ anemia.	
9 - Dupytren's contractures and atrophy in muscle.	
10 - Examine hand for tremor [sweating & temp].	
Note: - any scar or pigmentation you have to note it.	

Cyanosis:-

Bluish or purplish discoloration of skin & M.M. due to of deoxyhemoglobin $> 5\text{gm \%}$ which has dark color. In severe anemia even with very low O_2 saturation, cyanosis may not detected because total hemoglobin is low & deoxyhemoglobin $< 5\text{gm \%}$.

CO poisoning also not cyanotic because cherry-red color of carboxyhemoglobin.

Cyanosis 2 type's $\Rightarrow$ 1)-central:-under surface of tongue, inside lips & cheeks.

2)- peripheral :-nails, tip of nose, pinna of ears, outer surface of lips.

Central	Peripheral
respiratory	1. All causes of central cyanosis. 2. Cold exposure. 3. Raynaud's phenomenon. 4. Arterial occlusion thrombus. 5. Veins occlusion thrombus. 6. ↓C.O.P.
1. PE & pulmonary edema. 2. COPD. 3. Severe asthma. 4. Pulmonary fibrosis. 5. Pneumonia.	
cardiac	
1. Cyanotic heart disease.	
abnormal Hb	
2. methalo-hemoglobinemia. 3. sulpha-hemoglobinemia.	

Clubbing

Increase in longitudinal & lateral convexity of the nail.

Detected clinically by obliteration or loss of angle between nail & nail fold (dorsum of finger or toe).

Stage I: - +ve fluctuation test.

Stage II:- Loss of normal angle between nail & nail fold (filling of angle).

Stage III:- sham-Roth's sign ⇒ loss of window. ↑curvature.

Stage IV:- drum stick clubbing.

Stage V: - hypertrophic pulmonary osteoarthropathy ⇒ clubbing + pain.

D/D of clubbing

thoracic <i>resp.</i>	non thoracic
Tumor benign or malignant.	
1. Lung cancer $\Rightarrow$ (stage v) $\Rightarrow$ common.	1. Hepatic diseases <u>[cirrhosis]</u> .
2. Mesothelioma.	2. <u>Coeliac diseases.</u>
3. Pleural fibroma.	3. U/C & chron's $\Rightarrow$ <u>[IBD]</u> . ✓
4. Esophageal cancer.	4. Hyperthyroidism $\Rightarrow$ <u>[acropachy]</u> . ✓
5. Esophageal leiomyoma.	5. Familial $\Rightarrow$ (rare). ✓
6. Thymoma.	6. Traumatic. ✓
7. Atrial myxoma.	7. Idiopathic. ✓
sepsis	Asymmetrical Clubbing
a. Bronchiectasis $\rightarrow$ (common).	Unilateral
b. Empyema $\Rightarrow$ rapid e in few weeks.	<u>Anomalous</u> aortic arch
c. Lung abscesses.	<u>Aortic or sub-clavian artery aneurysm</u>
d. Infective endocarditis.	<u>Pulmonary hypertension</u> with patent ductus arteriosus
interstitial lung diseases	<u>Brachial arteriovenous aneurysm or fistula</u>
a. Fibrosing alveolitis.	<u>Recurrent shoulder dislocation</u>
b. asbestosis	<u>Superior sulcus (Pan-coast) tumor</u>
A-V mal- formation in in the lung $\Rightarrow$ (rare).	<u>Unidigital</u> $\Rightarrow$ Median nerve injury, Sarcoidosis
a. Cyanotic heart disease.	Clubbing of toes without fingers $\Rightarrow$ Coarctation of aorta

red;

breath odor D/D	mouth ulcer D/D
1) -halitosis (poor hygiene, bronchiectasis, lung abscess)	1) -traumatic.
2) -acetone → DM.	2) -Aphthous ⇒ (small superficial) idiopathic, premenstrual.
3) -ammoniac ⇒ uremia ⇒ CRF.	3) -inflammatory ⇒ chrons, coeliac.
4) -alcohol.	4) -SLE.
5) -hepatic fetor (fishy) ⇒ liver cirrhosis. <i>hepatic</i>	5) -infective:-
6) -feculent ⇒ intestinal obstruction.	a. viral ⇒ H.S
	b. bacterial ⇒ 1) - acut ulcerative gingivitis. 2) -syphilis.
	c. fungal ⇒ candidiasis.
	6) -pemphigus.
	7) -bachet syndrome.
	8) -reithers disease.

mouth with change in color D/D	Lip pigmentation
1) -white patches ⇒ a) -leukoplakia ✓ b) -thrush ⇒ candida infection.	1) smoking. ✓
2) -pallor ⇒ anemia.	2) peutz jeghers syndrome.
3) -blue ⇒ central cyanosis.	3) addison's disease. ✓
4) -red ⇒ a) -pernicious anemia. b) -vitamin b12.	
5) -dark pigments ⇒ Addison's diseases.	

Hand finding D/D:-

- 1. Cold + sweaty** ⇒ anxiety ⇒ due to sympathetic.
- 2. Cold + dry hand** ⇒ Raynaud's phenomenon.
- 3. Warm sweaty hand** ⇒ hyperthyroidism.
- 4. Warm dry CO2 retention**
- 5. Large + greasy + sweaty** ⇒ acromegaly.
- 6. Deformed hand** ⇒ Dupytren's contracture.

D/D of mass in neck:-**A. Superficial:-**

1. Sebaceous cyst.
2. Lipoma.
3. Dermoid cyst.
4. Abscess.
5. L.N.

B. The deep mass may be:-

Anterior Triangle	Posterior Triangle
Move e swallowing:-	1. Cervical rib. ✓
1)-thyroid.	2. sub-clavian A aneurysm. ✓
2)-thyro-glossal cyst.	3. Pharyngeal pouch.
	4. Carotid body tumor.
Not move: -	5. Cystic-hygroma.
1) - salivary glands.	6. Carotid aneurysm.
2)- branchial cysts	7. Sterno-mastoid tumor.

D/D of splinter hemorrhage	D/D of palmar erythema
1. trauma → common	1. SLE. + old age.
2. RA	2. RA
3. infective endocarditis	3. thyrotoxicosis
	4. polycythemia
	5. Pregnancy.

Types of tremor (D/D):-

- 1)- **resting tremor:-** Parkinson's disease.
- 2)- **action tremor :-**
 - a)- idiopathic. ✓
 - b)- essential tremor. ✓
 - c)- physiological. ✓
 - d)- anxiety. ✓
 - e)- exercise. ✓
 - f)- thyrotoxicosis. ✓
 - g)- drugs :- 1)- beta agonists. 2)- caffeine. 3)- alcohol.
 - 4)- phenytoin. 5)- lithium.
- 3)- **intention tremor:-** cerebella disease.

D/D of generalized pruritus :-

1. Psychological. ✓
2. Pregnancy. ✓
3. Blood: - iron deficiency anemia, PRV. *poly cythemia R.V*
4. Malignant: - leukemia, lymphoma. *<2.5*
5. Diabetes mellitus, hypertension.
6. Hyper-hypo (thyroid).
7. Obstructive jaundice, 1ry biliary cirrhosis.
8. Chronic renal failure.
9. Infection: - scabies.

Case with Edema:-

Definitions:

Edema: A clinically present as increase in the interstitial fluid volume.

Anasarca ⇒ gross, generalized edema.

Causes of generalized edema	Causes of unilateral LL edema
1. Cardiac failure	1. DVT
2. Liver Cirrhosis	2. Cellulitis
3. Nephrotic syndrome	3. Ruptured Baker's cyst
4. Malnutrition	
5. Hypothyroidism	
6. Pregnancy	
7. Drugs ⇒ Calcium channel blockers, NSAID, OCP	

Types of edema

1. **Pitting edema:** reflects increased interstitial fluid, occurs in all causes except lymphedema, and hypothyroidism (myxedema).
2. **Non-pitting edema:** reflect protein deposition lymphedema and hypothyroidism (myxedema).

Q- What are the sites to look for edema?

Visible	Non visible
1. Peri-orbital edema.	1. Papilledema by ophthalmoscope.
2. Fingers.	2. Plural effusion, pulmonary edema.
3. Abdomen for Ascites if large amount.	3. Ascites if small amount.
4. Sacrum in a bed ridden patient.	
5. Scrotum.	
6. Lower limbs.	

* Case with Generalized lymphadenopathy:-

Definition:- It's a lymphadenopathy that involves 2 or more non-contiguous sites Submandibular nodes <1 cm and inguinal nodes of < 2 cm, are considered normal.

N.B:- Epitrochlear LN: enlarged mainly in EBV and in Syphilis.

* **-If you found enlarged cervical L.N you have to say:-**

I like to look at the pharynx ⇒ because the most common cause of cervical lymphadenopathy **URTI** and **dental carries**.

* -I would like to examine other **groups of lymph nodes** and for **Hepatosplenomegaly** because all are a part of Reticuloendothelial system.

Questions in case of Generalized lymphadenopathy:-

◆ **-What is the name of left supraclavicular lymph node and what is its importance?**

Answer: - It's named Virchow's and it's enlarged in malignancy of the GIT mainly the Stomach cancer.

◆ **-If the patient is having night sweating what might be the cause?**

Answer:- Hodgkin lymphoma or TB.

◆ **-What are Ix you like to do?**

Laboratory tests:

- 1- CBC ⇒ Neutrophilia in **bacterial infection** & Lymphocytosis in viral infection.
- 2- ESR and CRP ⇒ elevated in (infection, malignancy & autoimmune disease).
- 3- Throat culture.
- 4- Monospot test = Paul-Bunnell test for EBV infection.
- 5- Blood film ⇒ EBV and Leukemia.

Imaging technique:-

- 1 - Chest x-ray** for Mediastinal lymphadenopathy ⇒ TB or Sarcoidosis.
- 2 - Abdominal ultrasound** to look for Para aortic lymph nodes.

Histopathological Ix:-

- 1 - Excisional lymph node biopsy** ⇒ to exclude malignancy.

D/D of lymphadenopathy

infection	malignancy
a) viral:- 1)- IMN 2)- EBV. 3)- HIV. 4) - CMV. 5) - rubella. 6)- measles.	a)- acute lymphoblastic leukemia.
b) Bacterial :- 1)- T.B. 2) - syphilis. 3)- brucellosis.	b)- chronic lymphocytic leukemia.
c) Protozoa:- toxoplasmosis.	c)-lymphoma:- 1)- Hodgkin's. 2)- non Hodgkin's.
d) - parasitic: - filariasis.	d)- myelo-proliferative disorders.
others	
a- Sarcoidosis.	
b- SLE.	
c- RA.	