CLINICAL EXAMINATION

general → المكان ضمنه تكون

local → مكان التكون → as surgon the local exam. is the abdomen.

By

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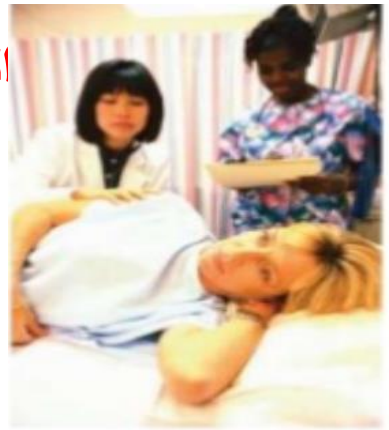
Three Sections

- Vital information. المريض شو بيدّلل؟ غني ولا فقير
  الها سبب مرضي، muscle wasting. ال cachexia [منا والتذكرة بعرفها]
  "ولّا لو فقير No one is taking care about him"

- General examination .

- Systemic examination .



Examination: --Local المنطقة الي فيها الشكوى

-- general other areas

* systemic examination → complete head to toe examination..

* general apperance → [بتشوف شكله] [inspection]

* اي شخص اكبر من 40 سنة وعنده enlargment lymph node at the neck

- → metastatic 80% from 1ry cancer
  - حتى يتم اثبات عكس ذلك.
- → 1ry tumor 15% [lymphoma < H / non H]..
- → non specific 5%

* أما اللي من 15 - 40 سنة واقل من 15 سنة غالباً يكون السبب
  - → conginital
  - → infection

- → B symptoms
- → color of skin [Jundice - Cyanosis - pallor]
  - Jundice:
    - medical [hepato cellular - liver cirrhosis ..etc]
    - surgical [obstruction - tumor - stone]
  - pallor → Anemia
- → Face [protonitis - cachexing syndrome]
  - protonitis ↓ sharp nose - hypochrotic face - العيون جاحظة
  - cachexing syndrome → with steriod [moon face - red cheecks]..
- → eye by examine the cranial nerves which move the eyes
  1. occulomotor..
  2. abducent..
  3. trochular.
- → mouth
  - → ulcer
  - → glositis
- → neck
  - → thyroid
  - → position of trachea
  - → lymph node [cervical] → 7 groups:-
    1. mediastinum [C7] at the chest
    2. horizontal [C1] → sub mandibular → sub mental → occipital
    3. below the Jagular [C2- C3-C4]
    4. central [C6] → pre-para tracheal → pre- para larengeal
    5. at post triangle [C5]
- → edema عند ال para sacral or ankle بدنا نشوف هل pitting / non pitting

Vital Data

- Name Of The Institution :
- Name Of The Doctor:
- Ward No:
- Cot No :
- Case No :
- Date:

personal data

- Name Of The Patient :
- Age :
- Sex :
- Religion :
- Caste :
- Married Or Single :
- Children :
- Occupation :
- Income
- Address

Occupation: Heavy holder--- disc

General examination

- GE is the first step of physical examination and a key component of diagnosis .
- *Inspection:* is the major component of GE with palpation and auscultation .

Inspection is very important, it tells you if the patient is fine or not "in pain or not"

We do general inspection of the face, eye.

The only thing on general exam. we do palpation is the hand

80% of general examination is by inspection.

- Jaundice– young age is CBD stones [common Bile duct stones].
  -elderly is liver cirrhosis, cholangiocarcinoma or head of pancreas tumor

I see jaundice by inspection so.

- Elderly, cachexia and pale skin, Hb=8 → GI malignancy till approved otherwise

❖ *AIMS*

- Assess the patient general condition .
- Detect manifestation of internal diseases .

❖ *3 Components*

- History taking clues are the Symptoms
- Physical examination clues are the Signs , "you illicit the sign أنت الي بتعملها"

* Tenderness is a sign and symptom

- Investigations clues are the Results .

---واحد ماسك بطنه ومش عارف يمشي appendicitis or perotinitis

--- واحد حاني ظهره Pancreatitis

Seeing patient walk to you is more important than seeing him lying on the bed– paraplegia and other features are obvious when the patient is walking to you

Instruments and Equipments

- **Stethoscope**
- **Sphygmomanometer**
- **Thermometer**
- **Torch**
- **Wooden tongue depressor**
- **Measuring tape** “measure size of a mass”

Note

- ***Exam begins the minute you see the patient***
- ***Exam continue through out your patient interaction.***

General Assessment

Good Physical Examination Requires

- **Cooperative patient.**
- **Good light.**
- **Quiet , warm room .**
- **Privacy & confidentially.**
- **Good exposure**
- **Good position of DR and Patient.**
- **Presence of a chaperon. ?**

Flat bed, 45 degree the head rised, raised
The patient exposed from the nipple to the knees, in some cases its accepted to the umbilicus
Examine the patient from the right

General examination

- General Appearance
- Hands and arms
- Skin — **Jaundice, pallor, cyanosis**
- Face
- Eyes
- Mouth
- Neck
- Oedema — Most common site is lower limb "ankle, parasacral"
- Lymph nodes
- Vital Signs
  - Temperature
  - Pulse (HR)
  - Respiration Rate
  - Blood Pressure

* O2 saturation.

General Assessment

- Position , posture and Gait of patient .
- Mental status of the patient(level of consciousness), speech .

Level of consciousness after RTA or MVC, we do Glasgow coma scale, the lowest value is 3 = dead

- Built , and Nutrition , BMI.

BMI= W/L2 normally [18-25]

Obesity carry many risk factors in surgeries as DVT, PE and wound infection.

Laparoscopy decreases the incidence of these comp.

Cosmetic result in surgery important in non-malignant cases, in malignant it carry no important.

- Distress & facial expressions .

ALL Muscles of facial expression supplied by facial nerve

Muscles of mastication (Temporalis - Masseter - medial and lateral pterygoid) supplied by the anterior division of mandibular branch of trigeminal nerve.

- their paralysis (especially masseter)→ easy open the mouth
- on the anterior border of masseter→ pulsation of facial artery.

External carotid artery branches:

Superior thyroidal 1st branch of EC arises from anterior surface, supply the upper 2/3 of the loop of thyroid and upper ½ of isthmus

Ascending pharyngeal - Lingual "tortious" - facial - occipital - posterior auricular - maxillary - superficial temporal "termination"

- Attitude standing waking, sitting, and lying down.
- Skin "look for pallor, jaundice, cyanosis" , MM.
- Breath odor and personal hygiene.

80% of bad mouth odor are due to 2 reasons → dental causes "as mouth abscess" and sinusitis

3rd cause gastroesophageal reflux (GERD), liver disease and alcohol also cause bad odor * there is specific odor - Aceton → DKA

- Stand on the Rt. Side.

NB . After History taking one should have an idea about most likely Affected System , and Suspicions about Diagnosis .

Pain when eating a fatty meal "دسمة" on the Rt side, sudden pain continue for 2-3 hours, radiate to the scapula and shoulder → so this is Gall stone

Renal colic / intestinal colic / Biliary colic { Pronitonitis

[walking - runing]

← بتحرك عادي

← لو طلبناه ما بتوجع.

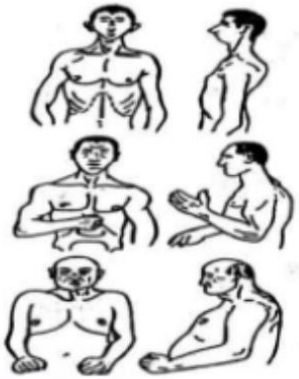
- lying stable   ما بتحرك لانه الحركة تزيد سوء الالتهاب

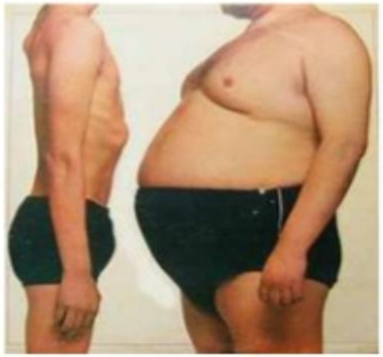
← هنا الوجع ما بيخلي الدكتور يلمسه.. ويثني ركبته وراسه حتى يخف الالم.

* Male → abdominothorathic breath
* Female → thoracoabdominal breath.

→ لو صار العكس يعني في خلل اما abdominal in male / thoracin infemale.

- Body Built





BMI, tall or short are important!!

Body Mass Index (BMI)

It is calculated by the formula $\text{weight} / \text{height}^2$ (Kg/m^2)

	BMI
Underweight	<18.5
Normal	18.5-24.9
Overweight	25-29.9
Obese	30-39.9
Morbidly obese	>40

Fears of hidden malignancy

The Body Mass Index

Weight Categories as per BMI Calculations

Normal
BMI 18.5 - 24.9

Overweight
BMI 25 - 29.9

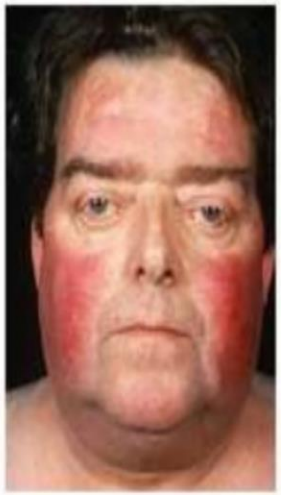
Obese
BMI 30 - 34.9

Severely Obese
BMI 35 - 39.9

Morbidly Obese
BMI ≥40

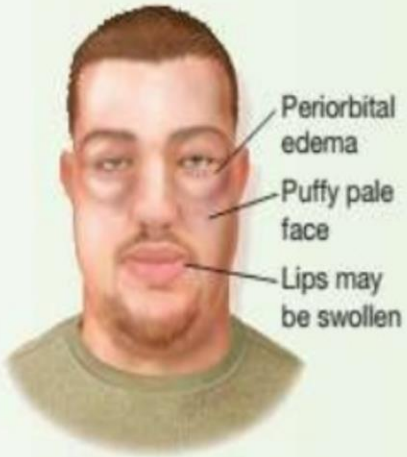
Facial feature/expression/ Mood/Attitude

FACIAL SWELLING



Cushing's Syndrome

The increased adrenal cortisol production of Cushing's syndrome produces a round or "moon" face with red cheeks. Excessive hair growth may be present in the mustache and sideburn areas and on the chin.



Nephrotic Syndrome

The face is edematous and often pale. Swelling usually appears first around the eyes and in the morning. The eyes may become slitlike when edema is severe.

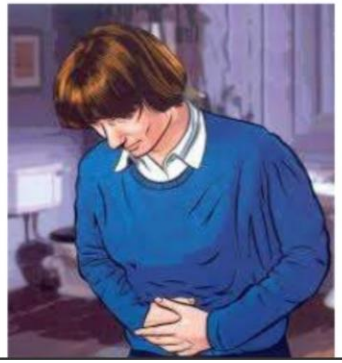
Myxedema

The patient with severe hypothyroidism (*myxedema*) has a dull, puffy facies. The edema, often pronounced around the eyes, does not pit with pressure. The hair and eyebrows are dry, coarse, and thinned. The skin is dry.

- **Compulsive supine position**

The patient lie down on the beck, with two legs bending.

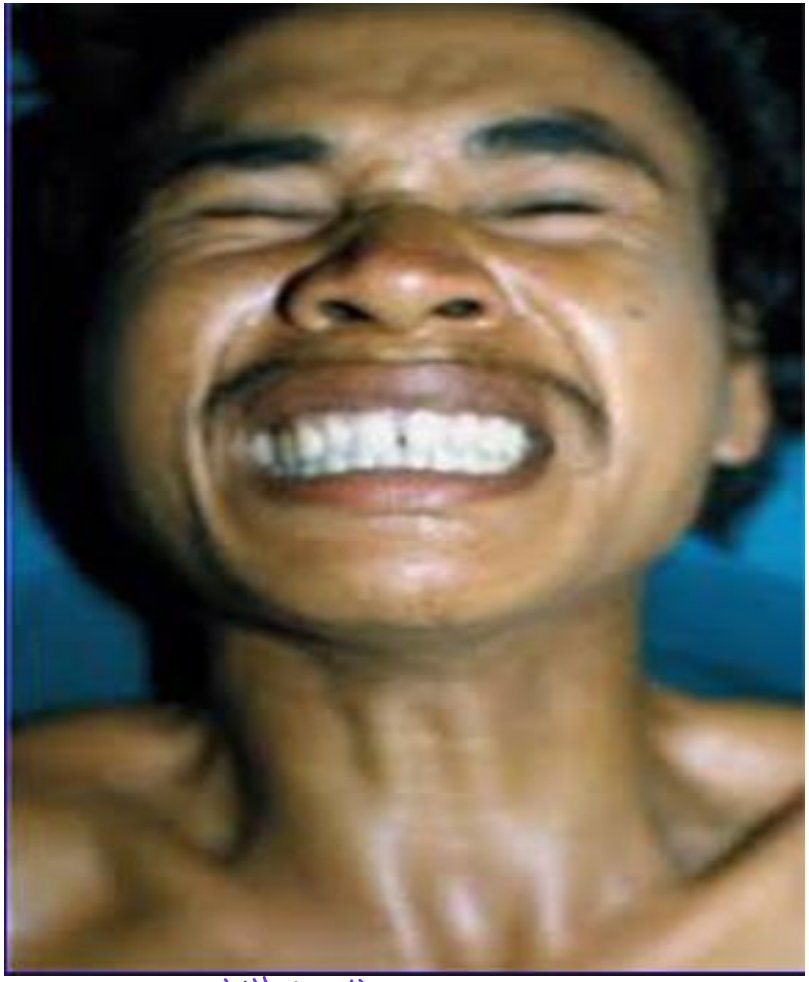
Acute peritonitis → Hippocratic face



Patient with perforated viscus "leak in the peritoneal cavity" is afraid to move, he learnt if he cough or move the pain get worse, on examination he say to you "touch me, NOT"

Patient with renal or biliary colic "يجري ويلفلف"

لما بيجي للدكتر بيعمل



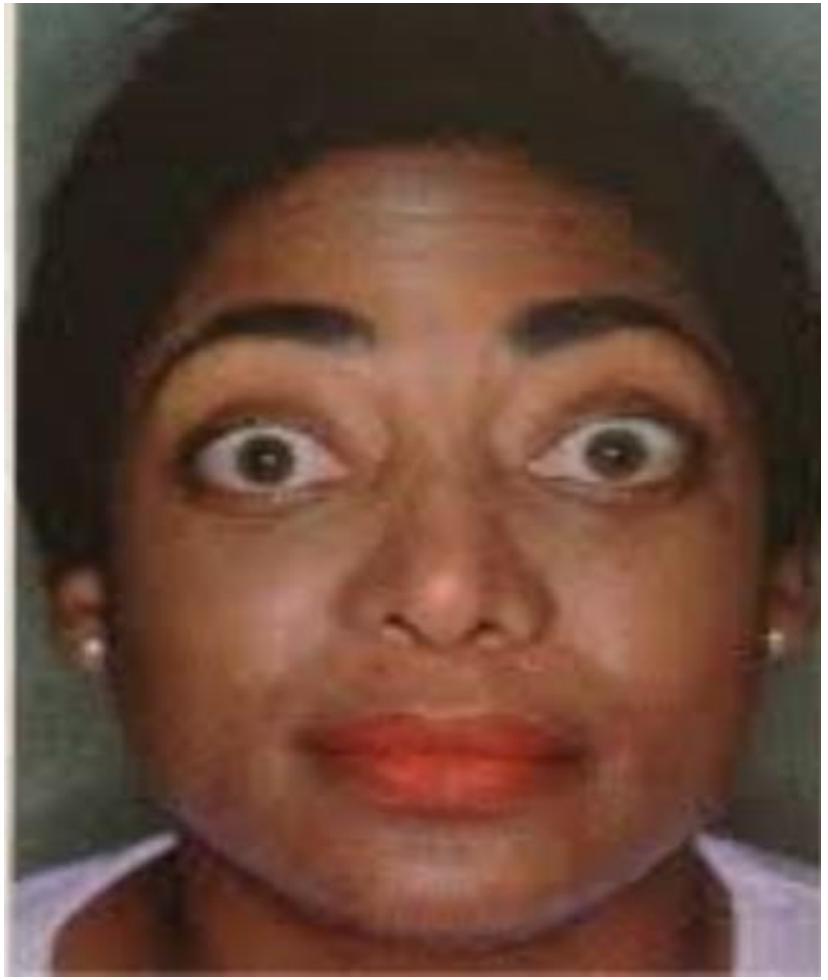
bitter smile

Risus sardonicus

Risus = smile

Seen in /

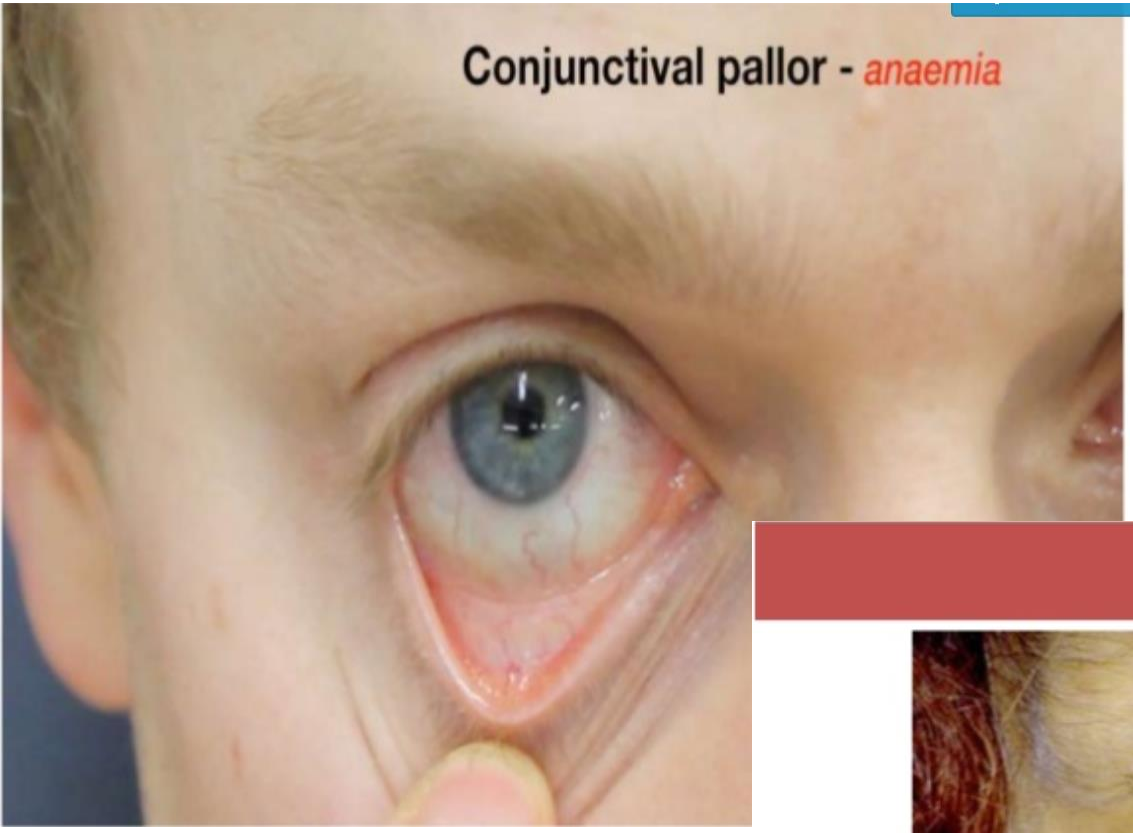
- Stricnine poisoning
- Tetanus



Hippocratic face

In peritonitis

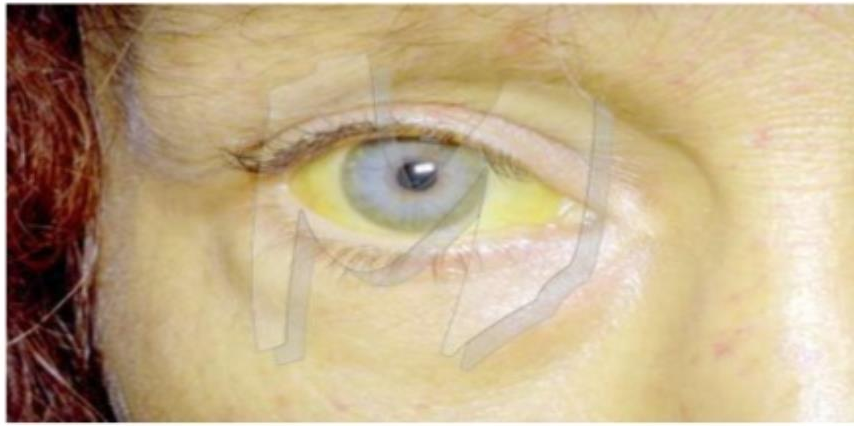
* Sunken eyes, sharp nose

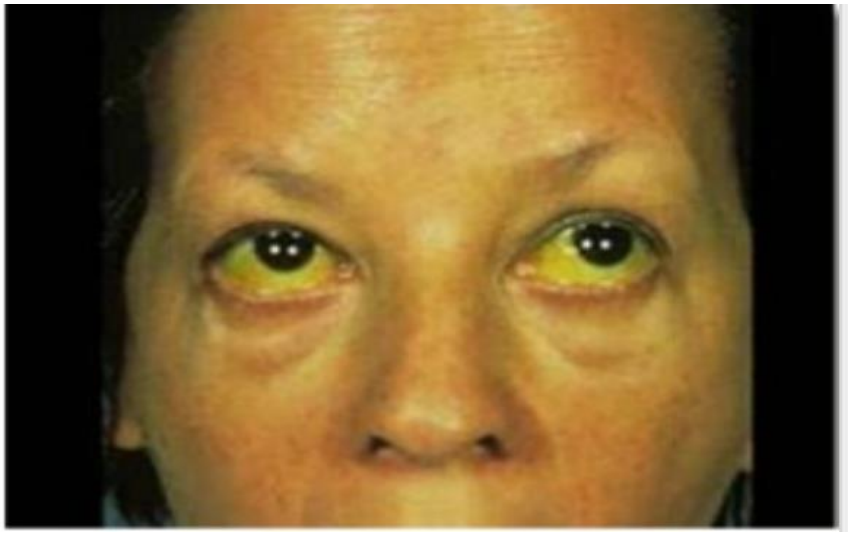


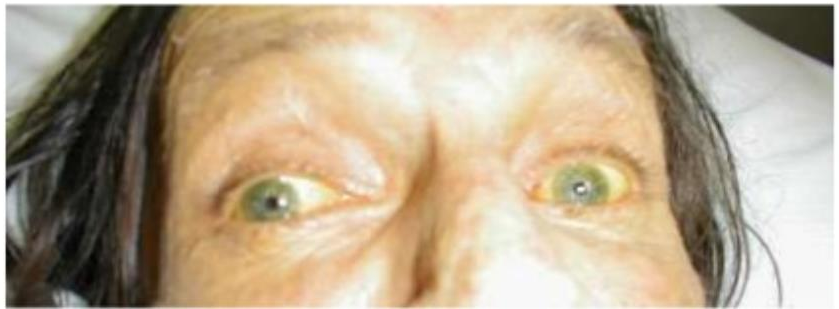
* Patient with jaundice in emergency room→ medical not surgical
If stones and dilated bile duct (obstruction) → surgical

- Pallor seen subconjuctival and mouth
- Easy palpitation, fatigue, pallor→ Anemia

Jaundice







Adenoid faces → بسبب تضخم ال adenoid

Open mouth, closed nose "closed posterior nasal aparature by the nasopharyngeal tonsil enlargment.

Tonsils are 6, 2 pairs "Palatine tonsil and Eustachian tonsil" and 2 single "Lingual and nasopharyngeal"

لانه راح تغلق فتحة الانف فبصير يتنفس من فمه و يشخر

→ فبيضل فمه مفتوح.

Vital signs

- ***Temperature :*** ***36.7 -37.2 ^{0} C.***

- ***Pulse :*** **60-80 min Rate , Rhythm, *Volume***

Character , palpable vessel wall.

Bradycardia in surgery is more important than tachy.→ patient is going into neurogenic shock due to pain

* There is Brady cardia in the neurological shock

مثلاً لو الألم بسبب المنظار، بشيل المنظار ويعطي "Atropine"

Tachycardia → means bleeding and shock

- ***Blood pressure :*** **110/70mmHg.**

Pulse pressure/ -systole- diastole = 40

* widening of P.P → mean he's improving.

- **Why surgeons care about it? Widening of pulse pressure "good, and if the patient pulse pressure is narrow and I give him liquids and the pulse become widened so the patient is getting better" and narrowing in pulse pressure "patient is going into shock"** * narrowing of pulse pressure → shock- Bleeding [<40]

systole – diastole =40 → its good and seen in hyperdynamic circulation, systole – diastole = 20 → he is bleeding

- **Hyperdynamic circulation causes//**
- **Anemia – pregnancy –fever – thyrotoxicosis – liver cirrhosis – AV shunt**

- ***Respiratory rate :*** **12-20 Cycle /M.**

* Main Arterial Pressure ⇒ D + 1/3 P.P.
→ good pulse volume → No Bleeding.

* infective endocarditis :- splinter hemorrhages nails.
* emphysema :- clumbing nail

Scheme of local examination

- **Inspection.**
- **Palpation.**
- **Percussion.**
- **Auscultation.**
- ***NB.*** ***Complete Head to Toe GE should precedes LE.***

* Cr3 → 2 sensory < ophthalmic / maxillary
→ 1 motor → mandibular → Ant (M) / → post (S)

glossopharyngeal cr9 فحص ال Gag reflex

ال lingual [nerve of Kissing]
ال injury بصير ع عمليات ال submandibular gland surgery or ازالة طاحونة [last tooth] اخيرة

mandibular

* أكثر nerve بيصير وقطع في ال RTA هو cr6 فبطل قادر يطلع لبرا [X lat vision]

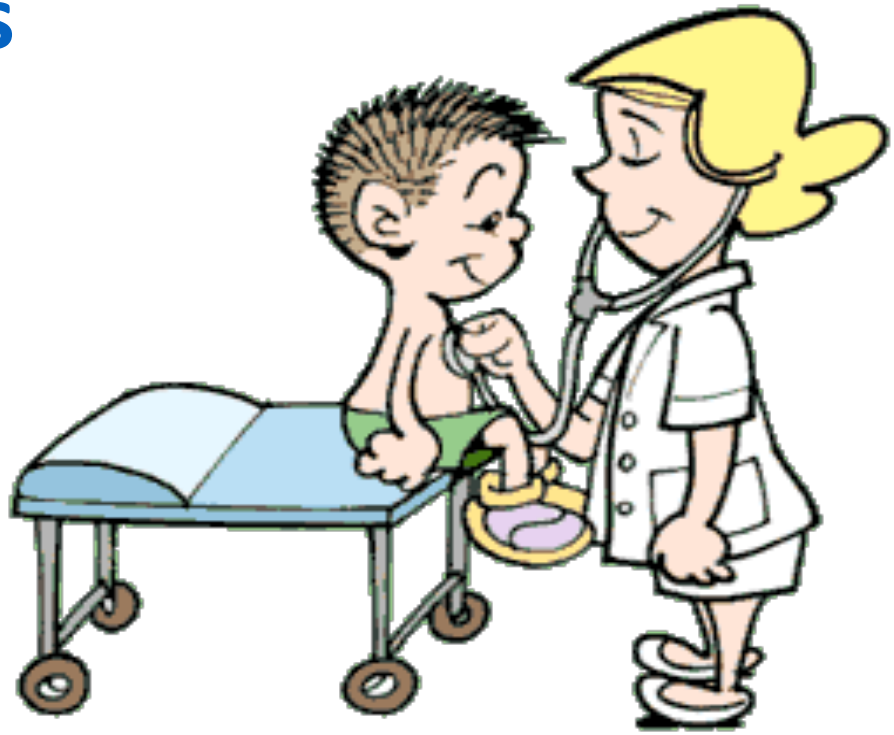
← ال cr 4 injury ← رح يصير معو diplopia [X downward]

(الاهم) ← ال cr3 injury ←
① ptosis
② mydriasis [dilate pupil / ↑ sympathetic]
③ looking down ward + lateraly Just.

* لو ال Hypoglossal N. injured رح يصير ← deviation of the tounge to the diseased side. but the uvula deviated to normal side..

General Observations

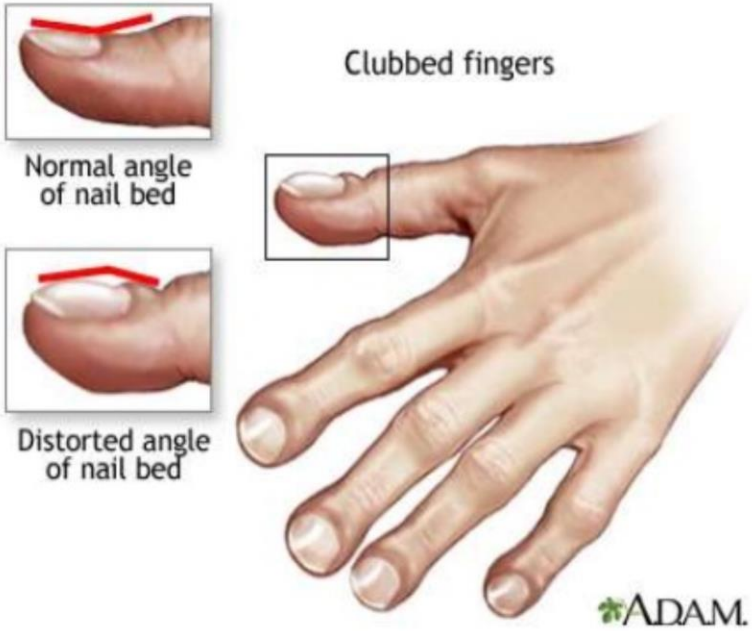
- Posture
- Mobility
- Weight
- Color of skin.
- Facial appearance.
- Body built.
- State of nutrition and hydration.

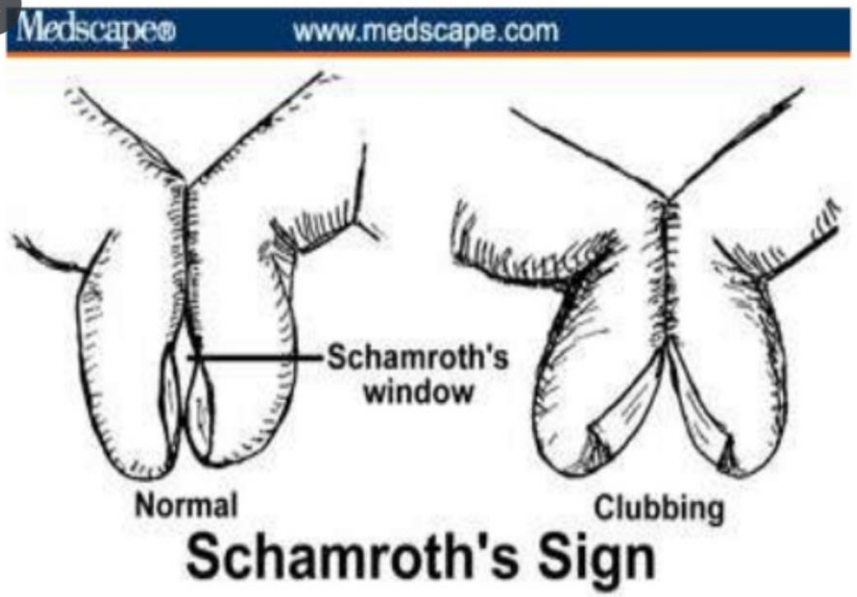


HOLD THE PATIENT *HAND* AND EXAMINE IT

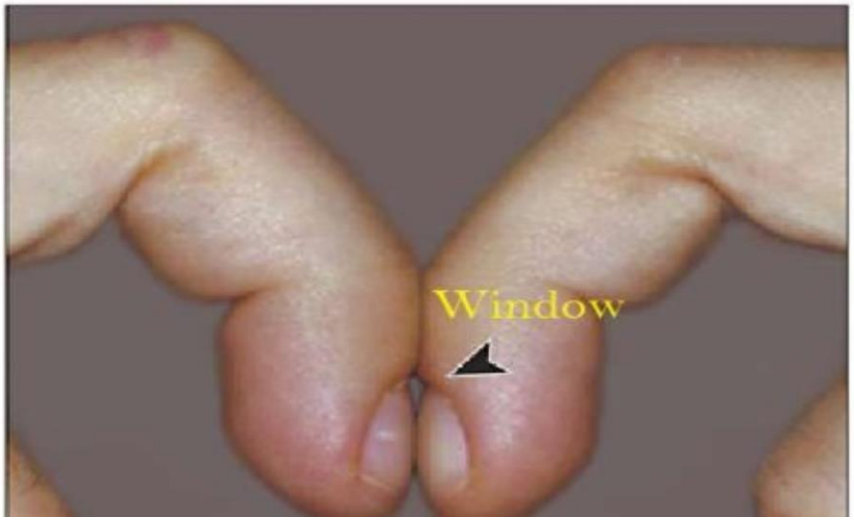
- ***Pulse:*** Rate, Volume , Regularity.
- ***Nails:*** Colour , Shape , Clubbing.
- ***Temperature: cold or warm***
- ***Moisture: sympathetic over-activity or shock***
- ***Color :*** Pallor, Reddish-Blue.
- ***Callosities***

↳ hyper hydrosis [sweating]
cervical sympathetic hyper ganglia ال عندي

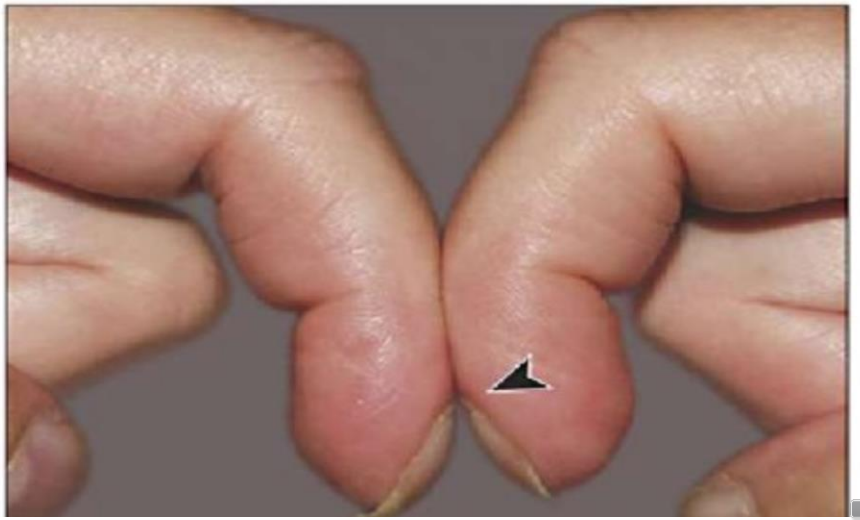




Normal



Clubbed

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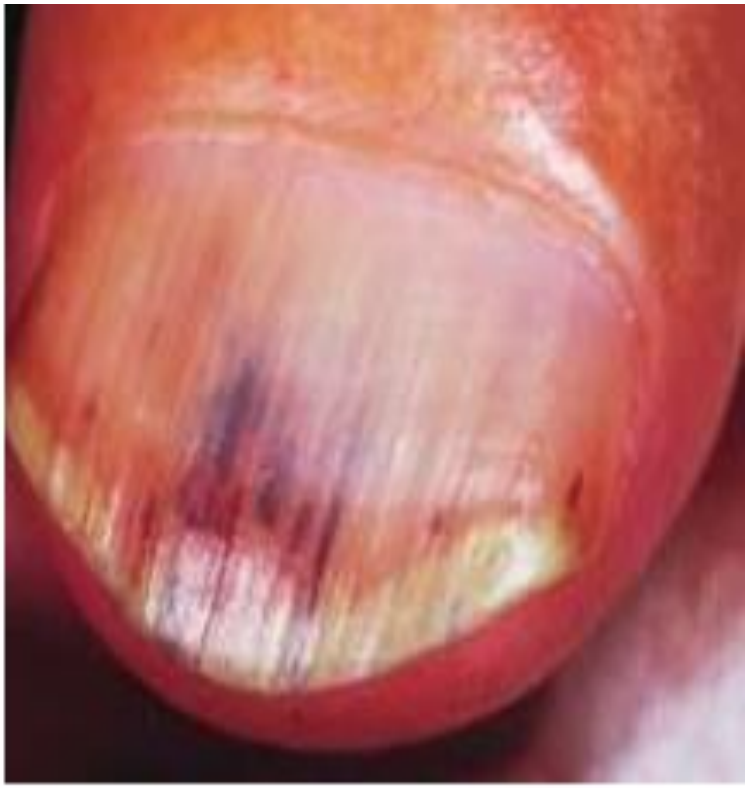
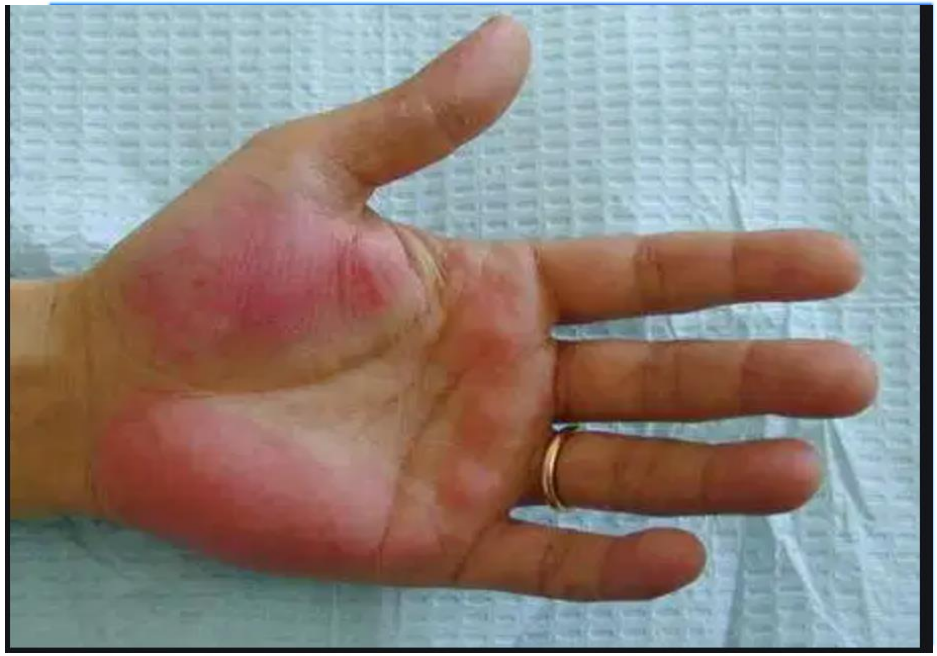
Splinter haemorrhages



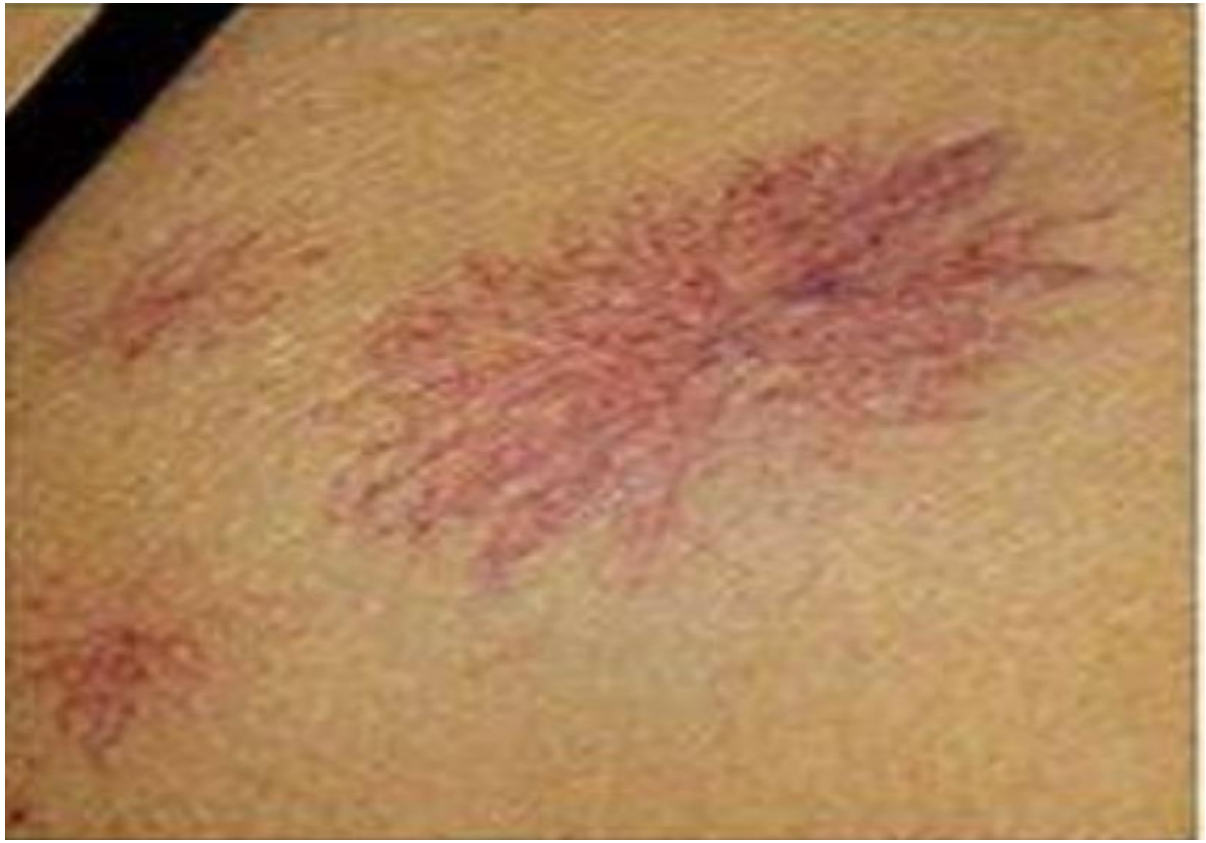
HANDS

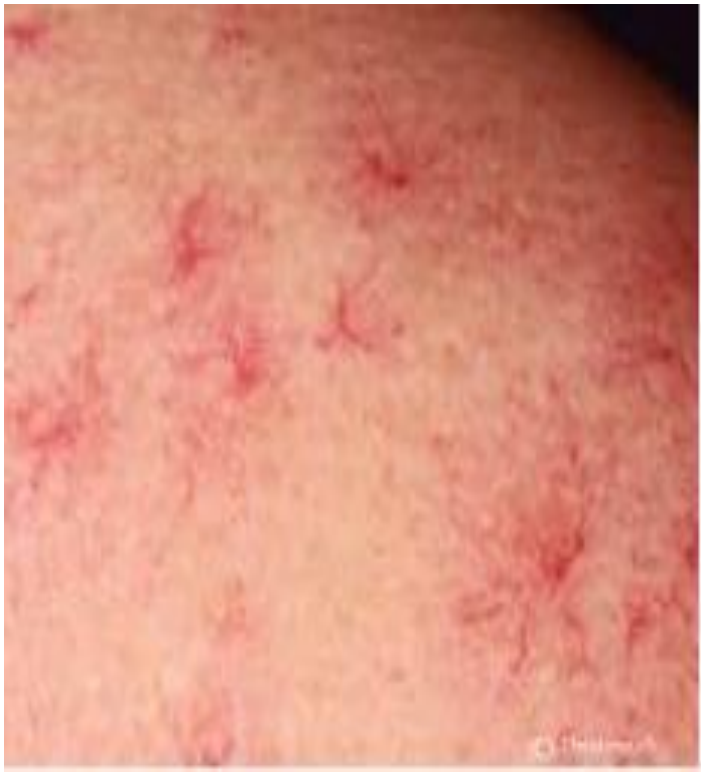


Palmar erythema
Liver cirrhosis

في كبار السن
Dupuytren's contractures
Ring finger, in males above 40 YO,
in Scandinavian countries.
Epilepsy and diabetes بيحصل عندهم

Spider Nevi





Spider nevi is found in 10% of healthy people more than 3 is abnormal (pathological) and denotes liver pathology, found only in distribution of SVC, head chest , upper abdomen.

dilated skin arteriole (central) surrounded by venous channels