# GENERAL PHYSICAL EXAMINATION

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#### Introduction

- Introduce yourself
- Ask permission to examine
- Are they comfortable lying flat?

- Look at the patients general appearance...at the face ,hands and body
- Each examining system can be described using four elements;
  - looking/inspection
  - feeling/palpation
  - tapping/percussion
  - listening/auscultation
  - assessment of function

#### VITAL SIGNS

- PULSE
- BLOOD PRESSURE
- TEMPERATURE
- RESPIRATORY RATE
- Should be assessed immediately once you discover that your patients unwell.
- They provide important basic physiological information.

### General Look

- Specific diagnosis can be made by just looking at a patient's face.
- Some facial characteristics are so typical of certain diseases that they immediately suggest the diagnosis....so called diagnostic facies.....

# Important diagnostic facies

- Acromegaly
- Cushingnoid
- Down syndrome
- Marfanoid
- Myxoedemetous
- Thyrotoxic
- parkinsonism

# Acromegaly





# Acromegaly hands



# Downs syndrome

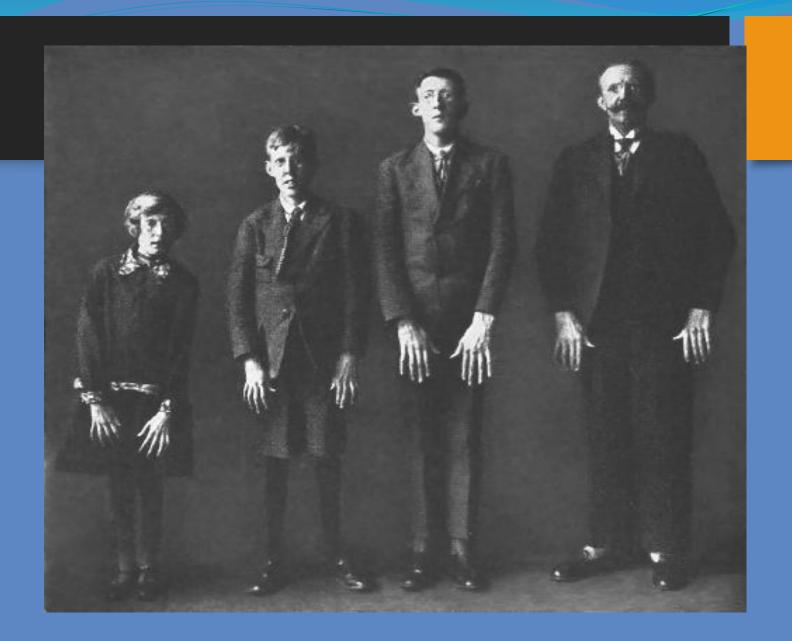


# Cushing's syndrome









### **JAUNDICE**

- It is the yellowish discolouration of a patient's skin and sclerae that results from hyperbilirubinemia.
- It happens when the serum bilirubin level rises twice above the normal upper limit.
- It is deposited in the tissues of the body that contains elastin.

# jaundice

#### Hep A Patient with Jaundice



## **CYANOSIS**

- <u>Blue discolouration</u> of the skin and mucous membranes; it is due to the presence of deoxygenated haemoglobin in the superficial blood vessels.
- Occurs when there is more than <u>5g%</u> of deoxygenated haemoglobin in the capillary blood.

#### Types-central and peripheral

- <u>Central cyanosis</u>- abnormal amount of <u>deoxygenated haemoglobin in the arteries</u> and that a blue discolouration is present in parts of the body with good circulation.eg;tongue.
- <u>Peripheral cyanosis-occurs</u> when blood supply to a particular part of body is reduced, eg; lips <u>in cold weather</u> becomes blue but the tongue is spared.





## Causes of cyanosis

- Central cyanosis
- 1)Decreased arterial oyygen saturation.
  - -high altitude
  - -lung disease
  - -right to left cardiac shunt
- 2)Polycythaemia
- 3) Haemoglobin abnormalities;

methaemoglobinemia,

sulphaemoglobinemia

- Peripheral cyanosis
- 1)All the causes of central cyanosis
- 2)Exposure to cold
- 3)Reduced cardiac output
- -left ventricular failure
- -shock
- 4)Arterial or venous obstruction

### **PALLOR**

- Deficiency of haemoglobin can produce pallor of the skin.
- Sites for looking for pallor-
  - palpebral conjunctiva,
  - buccal mucosa
- Should be noticeable especially in the palmer creases if the anaemia is severe- Hb of less than 8g/L.

# **PALLOR**



## Oral cavity

• The teeth and breath

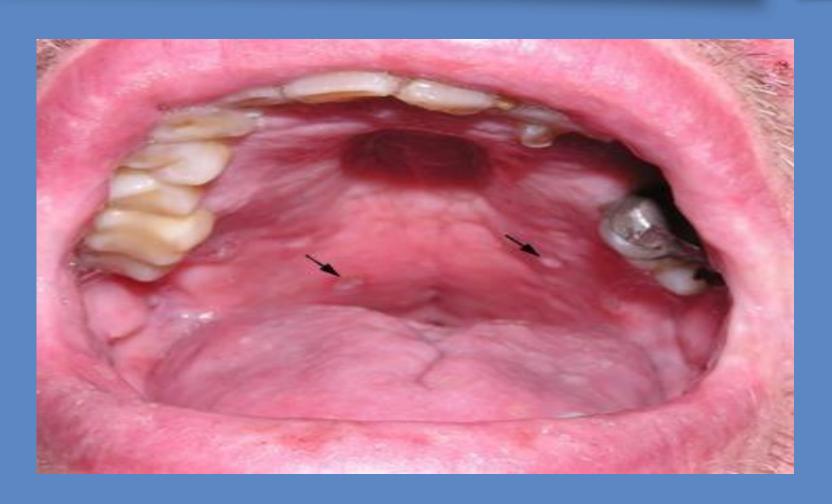
CHECK THE ORAL CAVITY LOOKING FOR

- MOUTH ULCERS
- -Aphtous,drugs and trauma
- -gastrointestinal disease; inflammatory bowel disease, coeliac disease
- -rheumatological;Behcets syndrome,reiter
- -erythema multiforme
- -infections; herpes zoster, simplex, syphilis, tuberculosis



Photo courtesy of CDC - Sol Silverman, Jr., DDS

# Behcets ulcers



## Gum hypertrophy

- Phenytoin
- Pregnancy
- Scurvy(vitamin C deficiency; gums become swollen, spongy, red and bleeds easily)
- Gingivitis; smoking
- leukemia



## Pigmentation in the mouth

- Heavy metals-lead, bismuth, iron; haemochromatosis there is blue grey pigmentation in the hard palate
- Drugs-antimalarials,OCPs(brown/black pigmentation anywhere in the mouth)
- Addisons disease
- Peutz-jeghers syndrome
- Malignant melanoma



Figure 20

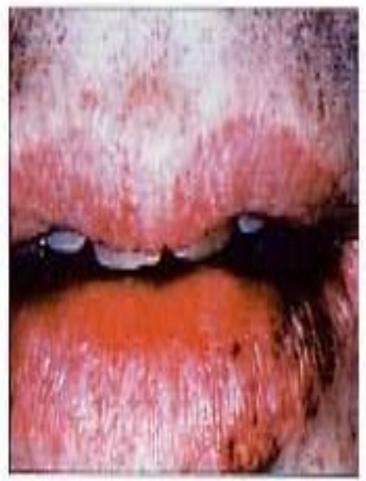
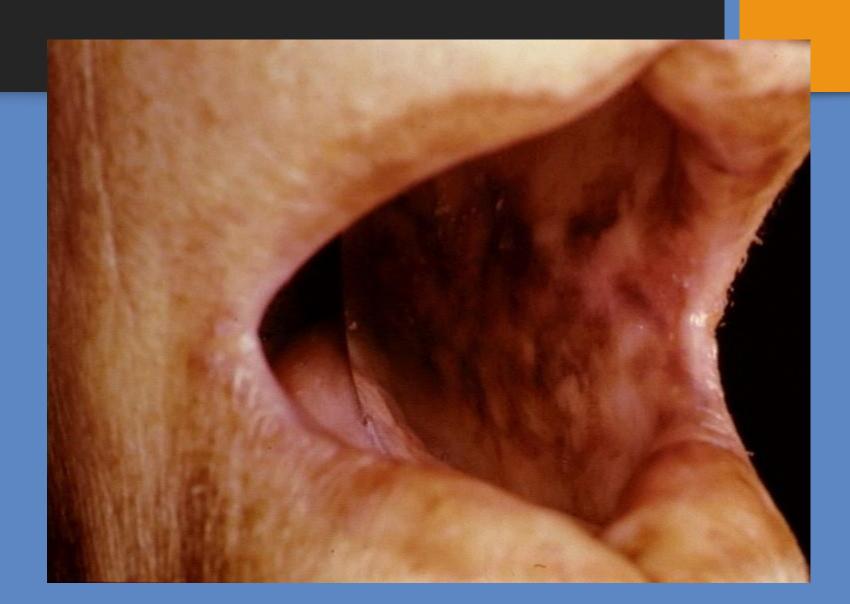


Figure 21



## **HAIR**

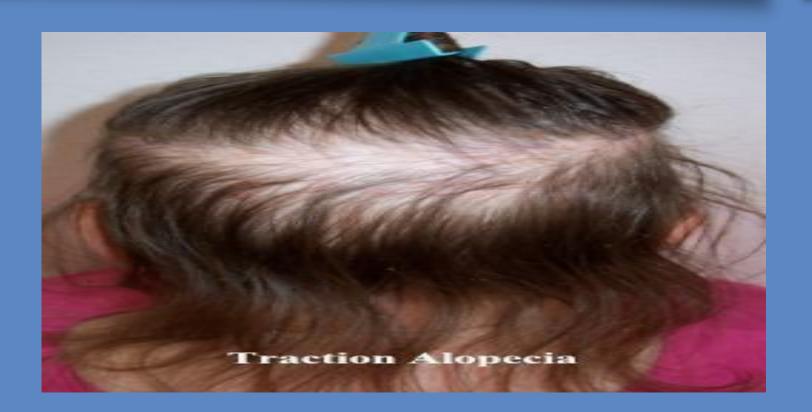
#### **ALOPECIA**

- Non-scarring
  - -alopecia areta
  - -scalp ring worm
  - -traction alopecia
- Scarring
  - -burns, radiation, lupoid erythema, sarcoidosis

# Alopecia areata



# Traction alopecia



# Alopecia totalis



## NECK; lymphadenopathy,goitre

- During palpation of lymph nodes the following features should be considered;
- SITE
- -Localised or generalised?
- -palpable lymph node areas are;
  - Epitrochlear, axillary, cervical and occipital, supraclavicular, para-aortic, inguinal and popliteal.

#### SIZE & CONSISTENCY

- -hard are suggestive of carcinoma
- -soft may be normal
- -rubbery may be due to lymphoma

#### **TENDERNESS**

-Acute infection of inflammation

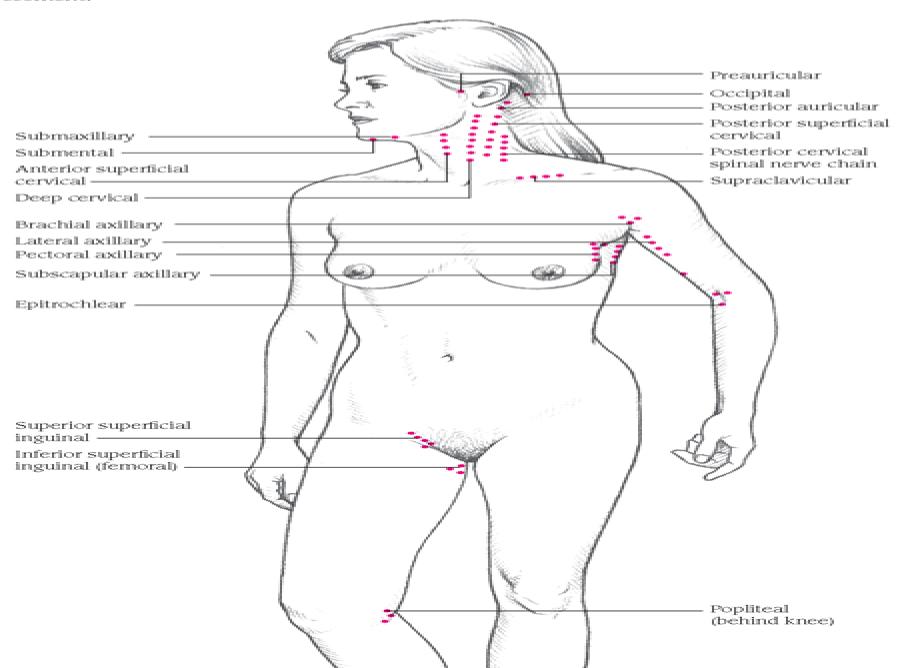
#### **FIXATION**

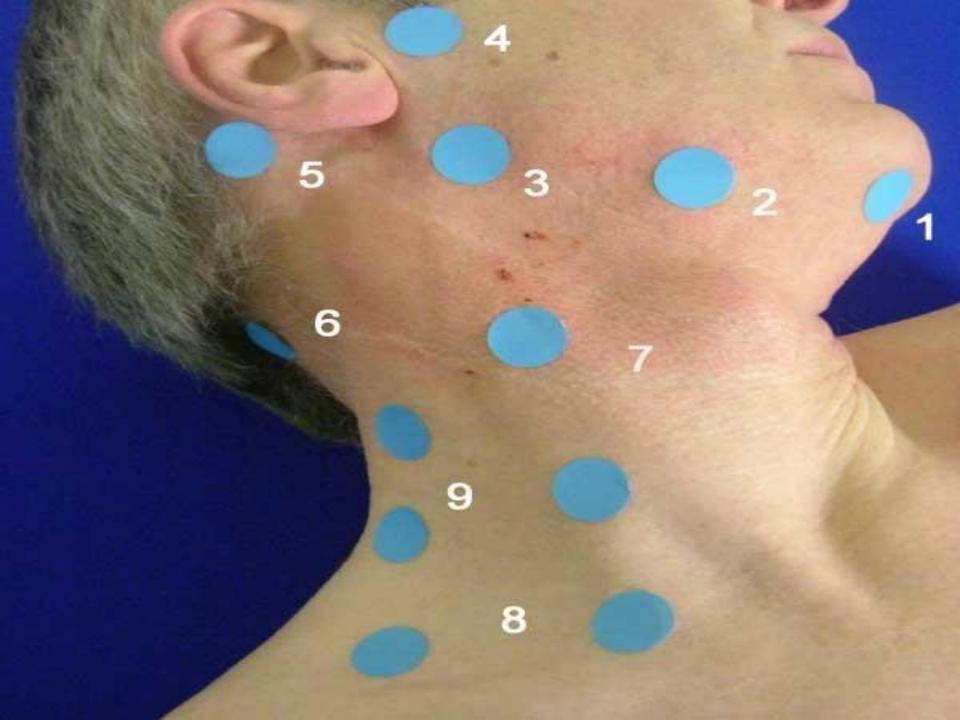
-If fixed to the underlying structures its most likely malignant

#### **OVERLYING SKIN**

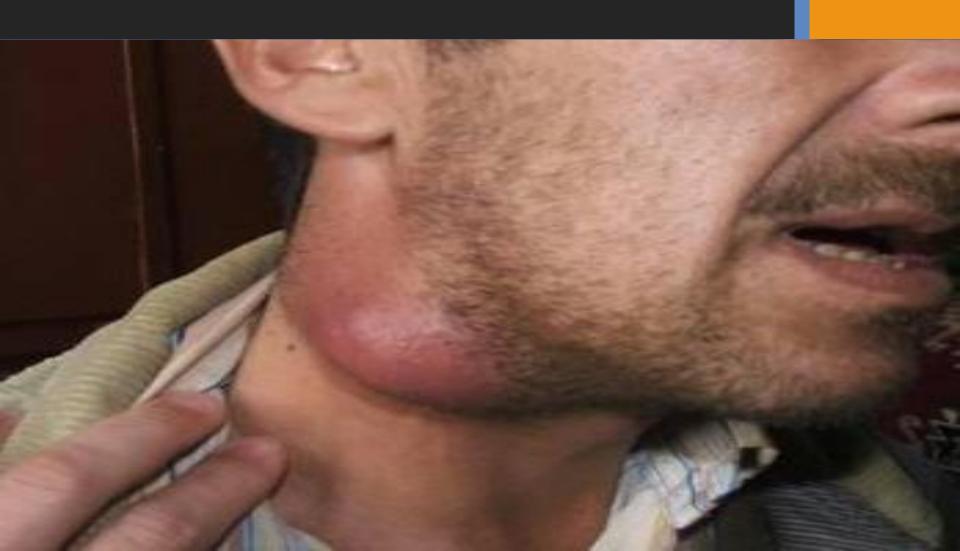
-if inflamed then its suggestive of infection, teethered suggests carcinoma.

When you detect an enlarged lymph node, palpate the entire lymph node system to determine the extent of lymphadenopathy. Include the lymph nodes indicated below in your assessment.





# Cervical lymphadenopathy



## CAUSES OF LYMPHADENOPATHY

- GENERALISED
- -lymphoma
- -leukemia
- -infections
  - -viral;infectious mononucleosis,CMV,HIV
  - -bacterial;tuberculosis,syphilis
  - -protozoal;toxoplasmosis
- -connective tissue disease
- -infitration; sarcoidosis
- -drugs;phenytoin

## Localised

- Local or acute infection
- Metastasis from carcinoma or other solid tumour
- Lymphoma especially hodgkin's disease

## **NAILS**

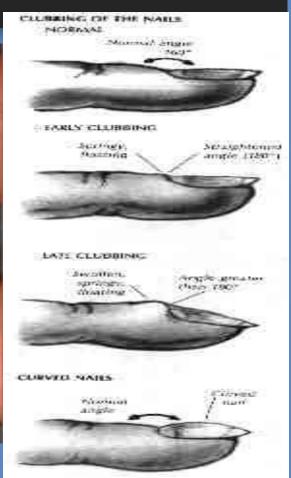
- **CLUBBING** 
  - -Increase in the soft tissue of the distal part of the fingers or toes.
- •CAUSES
- 1)Cardiovascular
  - -cyanotic congenital heart disease,IE
- 2) Respiratory
  - -lung carcinoma
  - -bronchiectasis,lung abscess,emphyema
  - -lung fibrosis
- 3)Gastrointestinal
- primary biliary cirrohis,IBd,Coeliac disease, Bilhazial polpososis,GI lymphoma
- 4)Familial

## Grade Description of Clubbing

- Grade 1
  - -Softening of nail beds
- Grade 2
  - -Obliteration of the angle between the nail and the nail bed
- Grade 3
  - -Swelling of subcutaneous tissues over the base of nail causing overlying skin to be tense, shiny & wet; increasing nail curvature; resulting in Drumstick appearance or Parrot beak appearance
- Grade 4
  - -Swelling of fingers in all directions associated with Hypertrophic pulmonary osteoarthropathy causing pain & swelling of hand & wrist

# clubbing







- Blue nails-cyanosis, Wilson ds
- Red nails-polycythaemia,CO poisoning
- Yellow nails- yellow nail syndrome
- Splinter haemorrhages-IE, vasculitis
- Koilonychia-iron def anaemia, fungal infection, raynauds
- Onycholysis-thyrotoxicosis,psoriasis
- Leuconychia-hypoalbuminemia
- Nailfold erythema-SLE
- Terry's nails-CRF, cirrohis

# Psoriasis (pitting)





# EDEMA

- Collection of fluids in interstitial spaces or serous cavities.
- Becomes evident only when 5-6lits of fluid is accumulated.
- Types –
   Pitting
   Non-pitting
- Sites –
   Common in lower limbs (dependant area)

#### Mechanism -

- Icreased capillary permeability
- Increased capillary pressure
- Decreased osmotic pressure
- Damaged lymphatic drainage

### Causes of edema

#### Bilateral edema

- Cardiac (CCF,LVF)
- Renal (nephrotic syndrome)
- Hepatic (liver cirrhosis)
- Venous (IVC obstruction)
- Endocrine (myxedema)
- Allergic (angioneurotic)
- Toxic (epidemic)
- Nutritional (anemia, beriberi)

#### Unilateral edema

- Lymphatic (filariasis, radiations, metastasis)
- Traumatic
- Infectious
- Metabolic
- Venous (DVT, Varices)
- Hereditary

## Severity of Bilateral pitting edema:

1+ (mild): Both feet/ankles

2+ (moderate): Both feet + lower legs, hands or lower

arms

**3+ (severe):** Generalized bilateral pitting edema, including both feet, legs, arms and face

# STAY HOME BREAK THE CHAIN

# THANK YOU