

HEAD & NECK

EXAMINATION

Dr. Mahmoud Ibrahim



Head & Neck Examination Checklist



Skull

- **Skin & hair of Head**
- **Eye**
- **Nose**
- **Ears**
- **Temporo-mandibular joint**
- **Cheeks**
- **Lips**
- **Teeth**
- **Gum**
- **Tongue**
- **Buccal mucosa, palate**
- **Tonsils and pharynx**
- **Parotid enlargement**

Neck

(1) Skull

1- Shape.

Oxycephaly



Brachycephaly



Dolichocephaly (Elongated head)



2- Size

Hydrocephalus



Microcephaly



3- Scalp



4- Enlarged supraorbital ridges



**5- Tender temporal artery
(giant cell cranial arteritis).**

**6-Bruit on auscultation of the skull
(intracranial arteriovenous malformation).**

7-Eye

A-Loss of hair in the outer 1/3 of eyebrow

- Myxoedema.
- Leprosy.
- Artificial.



B-Exophthalmos

- Thyrotoxicosis.
- Cavernous sinus \$.
- Leukaemic
- Congenital glaucoma.



C-Enophthalmos

- Dehydration.
- Horner's syndrome.



D-Eye lid

- Ptosis:
- Congenital.
- Mechanical.
- Oculomotor
- Horner's \$
- Myasthenia gravis.



Puffy eye lids:

- Renal
- Myxoedema.
- Chronic cough.
- Angioneurotic oedema.
- Mediastinal \$ with SV.C. obstruction.
- Part of generalized oedema, as liver cirrhosis & C.H.F.



E-Sclera:

- **Blue sclera:**

Congenital glaucoma.
Osteogenesis imperfecta.



- **Jaundice**



F-Conjunctiva:

- **Pallor.**



- **Sub conjunctival H**

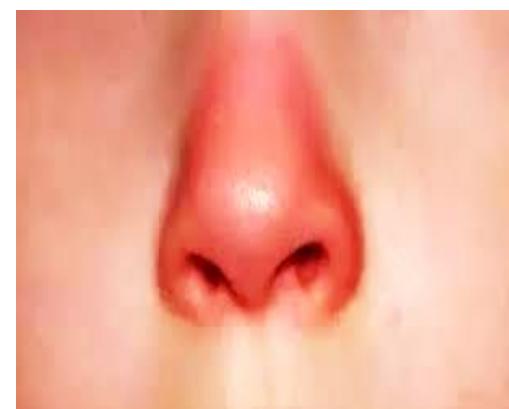
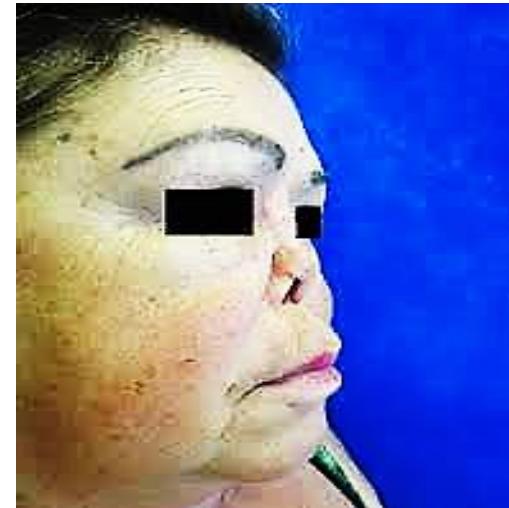


- **Conjunctivitis**



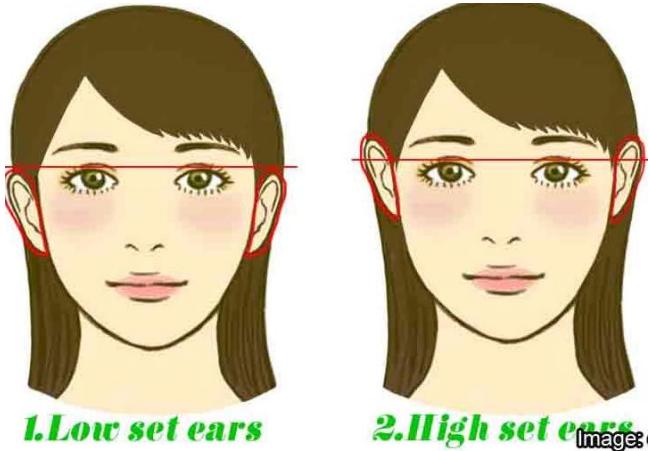
8-Nose

- Large : congenital - 'acromegaly myxoedema.
- Sunken bridge (saddle nose) in congenital \$,
- Tophi
- Working ala nasi (pneumonia or nervousness.)
- **Redness of the tip of the nose: alcoholism.**
- Ochronosis (blue black pigmentation)
this occur in Alkaptonuria.
- **Lupus pernio (bluish red)**
(sarcoidosis).
- Nasal polyps with chronic atopic rhinitis
and aspirin sensitive asthma.

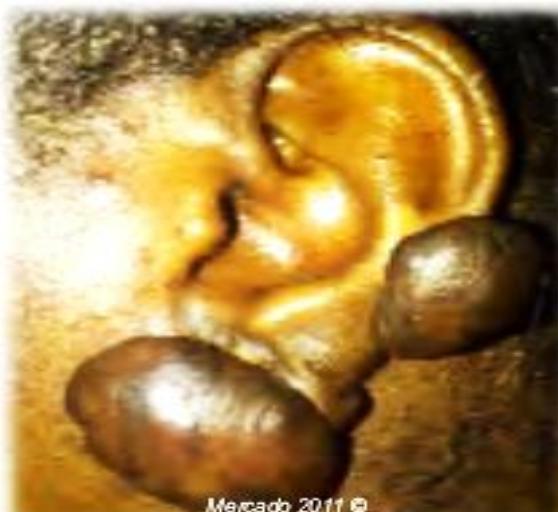


9-Ear

- Low set ear may be associated with congenital anomalies e.g. congenital H.D.



- Gouty tophi on the helix,





10-Cheeks

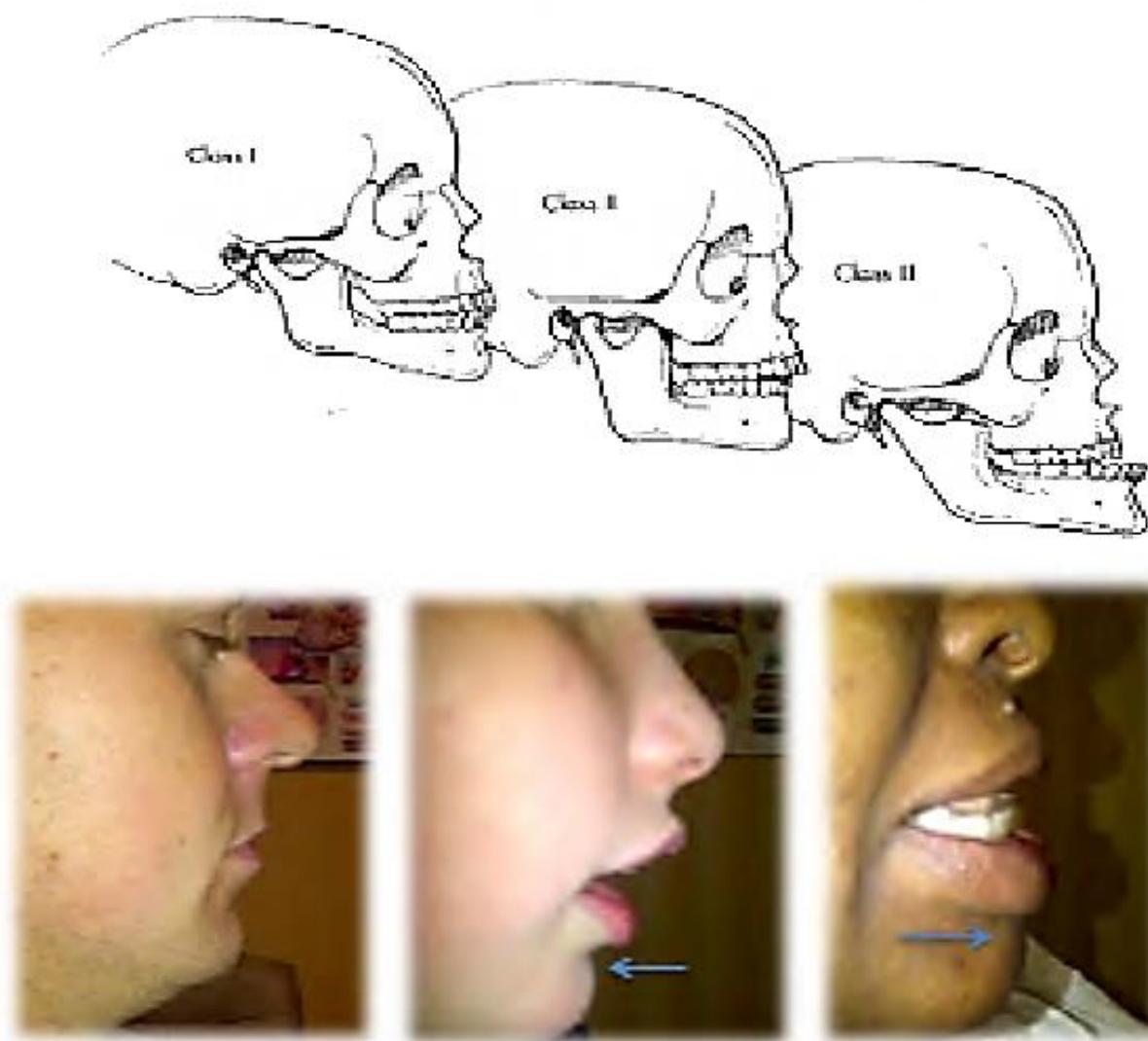
- Pale in anemia
- Malar flush in M.S. & myxedema
- Butterfly erythema in S.L.E.
- Discoid Lupus
- Photosensitivity
- Bloated in cushing disease
- ochronosis as above

11-Lips



- Angular stomatitis.
- Cheilitis: painful vertical Crohn's
- Pallor,
- Cyanosis
- Angioedema,
- Herpes labialis.

Examination of Mouth



Oral Malocclusion -
Definitions of the
normal and abnormal
bite.

Class I: normal

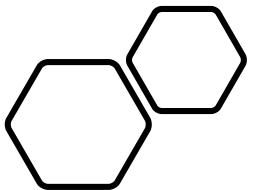
Class II: lower teeth too
far behind upper teeth;
usually associated
with a recessed lower
jaw (micrognathia).

Class III: lower teeth in
front of upper teeth;
usually associated
with a recessed upper
or protrusive lower
jaw.

12-Teeth

- Discoloration: Tobacco, poor hygiene
- Loosing of teeth: D.M.
- Wide spacing: Acromegaly.
- Notched: congenital syphilis (Hutchinson's teeth)
- Dental caries, tooth extraction for its relation to infective endocarditis.





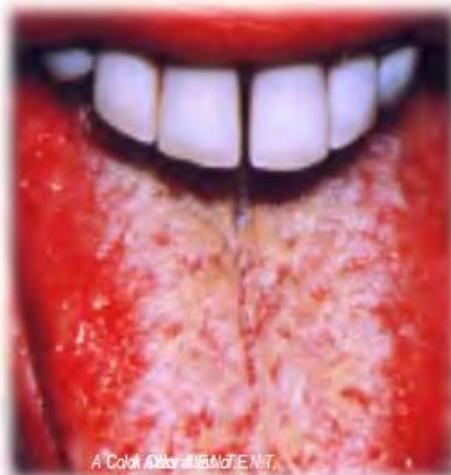
13-Gume

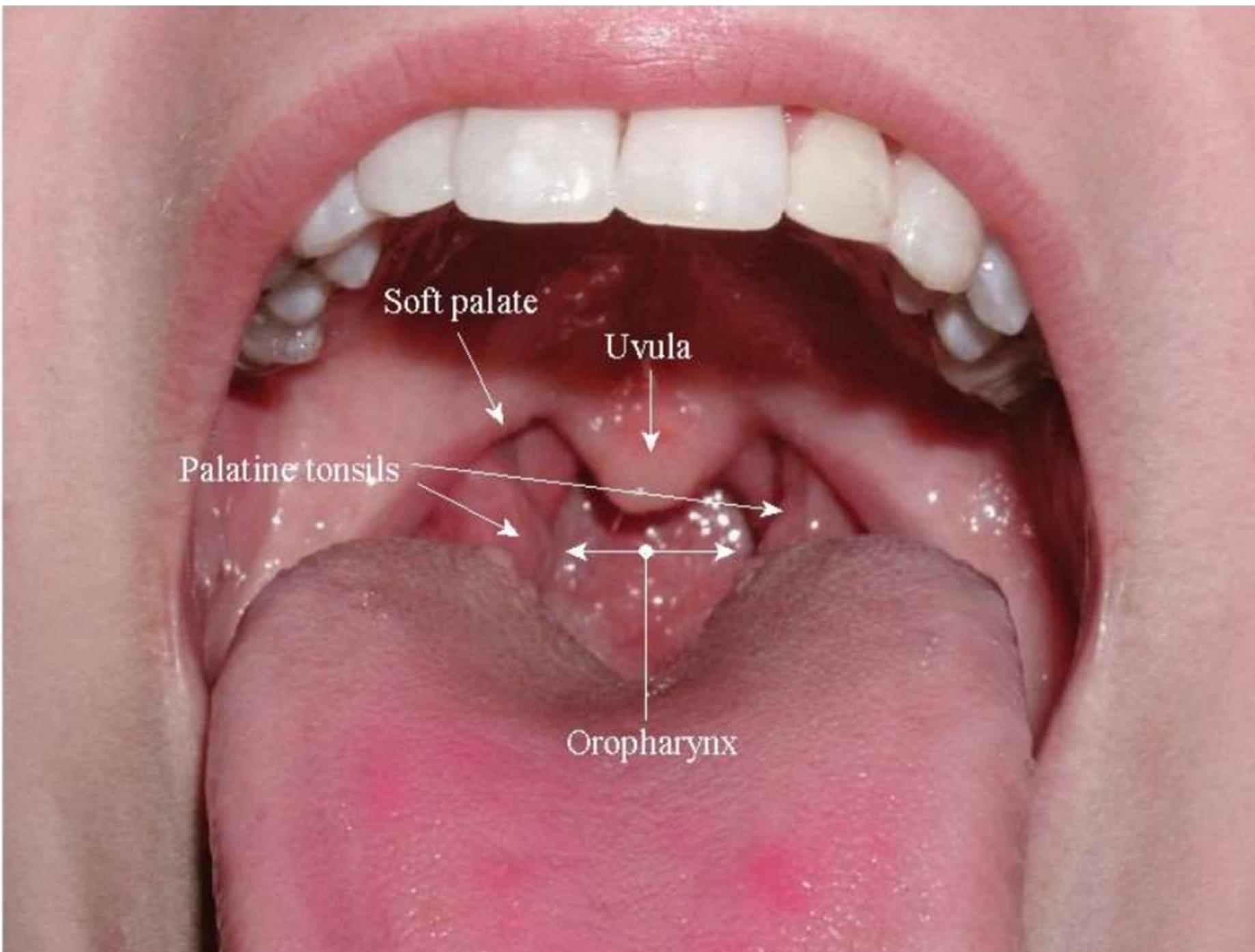
- Bleeding:
- Hypertrophy: Epanutin, monocytic leukaemia.
- Blue line: lead poisoning.



13-Tongue

- Colour:
 - Black with iron therapy.
 - Brown with smoking.
 - Blue with cyanosis
 - Pale with anaemia.
- Atrophy: (Glazed red tongue)
 - With iron! anaemia.
 - Hypovitaminosis e.g.: B12 !
- Leucoplakia:
 - Due to chronic irritation, it is precancerous.
- Moisture:
 - Dry tongue (under surface) = dehydration.
- Tremors of the tongue:
 - Thyrotoxicosis.
 - Parkinsonism.
- Scrotal or fissured tongue:
 - Down syndrome and acromegally.
- Strawberry tongue:
 - Scarlet fever.
- Macroglossia:
 - In myxoedema, acromegaly, amyloidosis
- Oedema of the tongue occurs in angioneurotic oedema.





Buccal mucosa, palate. tonsils and pharynx:

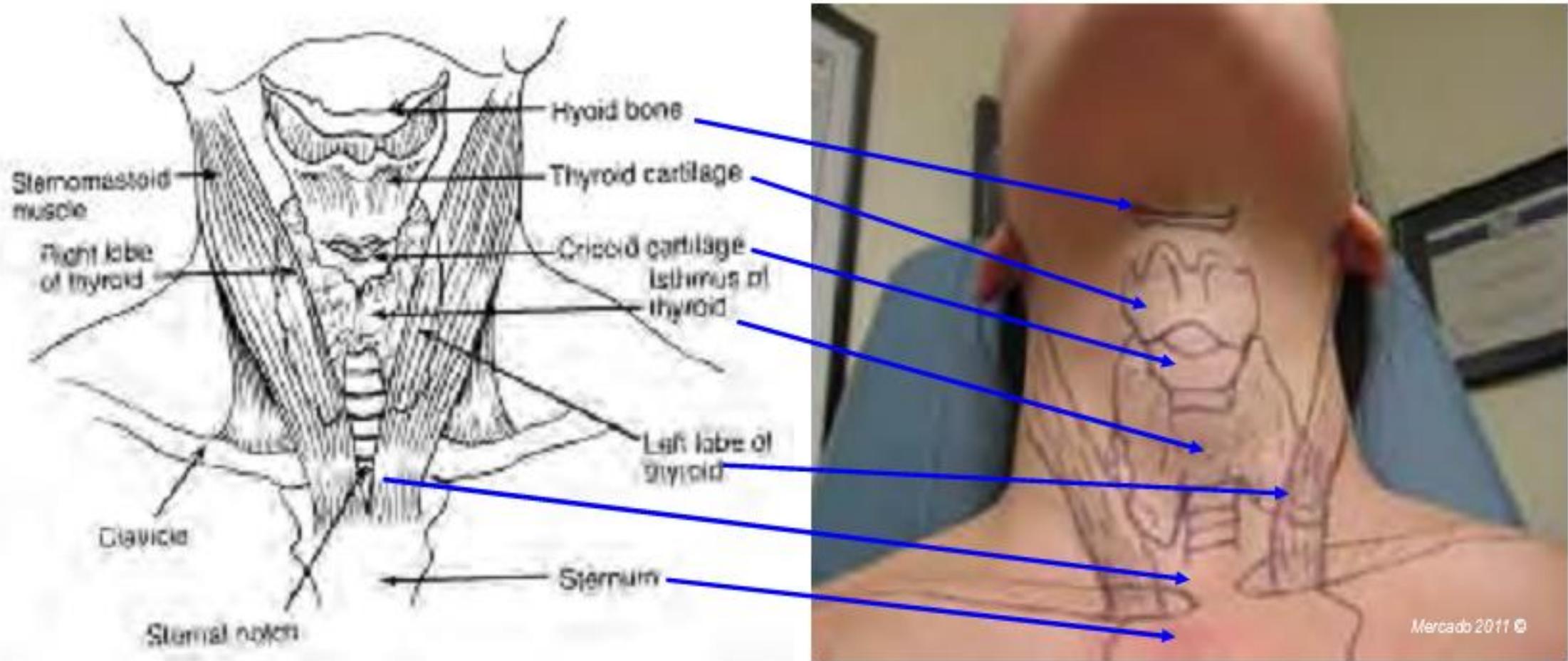
- **Buccal mucosa:**
 - Pigmentation (Addison's disease).
 - Aphthous stomatitis, they are ulcers on the inner sides of the lips, the edge of the tongue and the insides of the cheek.
 - Koplik's spots.
 - ~ Tonsillitis and pharyngitis: may be related to Rh. F and acute G.N.
- **~ Palate:**
 - Jaundice appears early in the soft palate.
 - Petechial spots in thrombocytopenic purpura and leukemia.
 - Pin point petechial spots also in infectious mononucleosis.
 - High arched palate or cleft plate in congenital conditions, palatal movement, palatal and pharyngeal reflexes (see neurology).

Parotid enlargement:

- Mumps.
- Sarcoidosis.
- Liver cirrhosis.
- Endemic parotitis.
- Stones & Tumor.
- Hypoproteinaemia.
- Sjogren syndrome.



Examination of Neck



NECK

Assessment includes,

- Neck muscles
- Lymph nodes
- Trachea
- Thyroid gland
- Carotid arteries and jugular veins

Techniques

- ✓ Inspection
- ✓ Palpation
- ✓ Auscultation

Trachea

Palpate the trachea for lateral deviation

- **Normal :**

Central placement in midline of neck

- **Deviation from normal:**

Deviation to one side
(neck tumor, thyroid or lymph node enlargement)

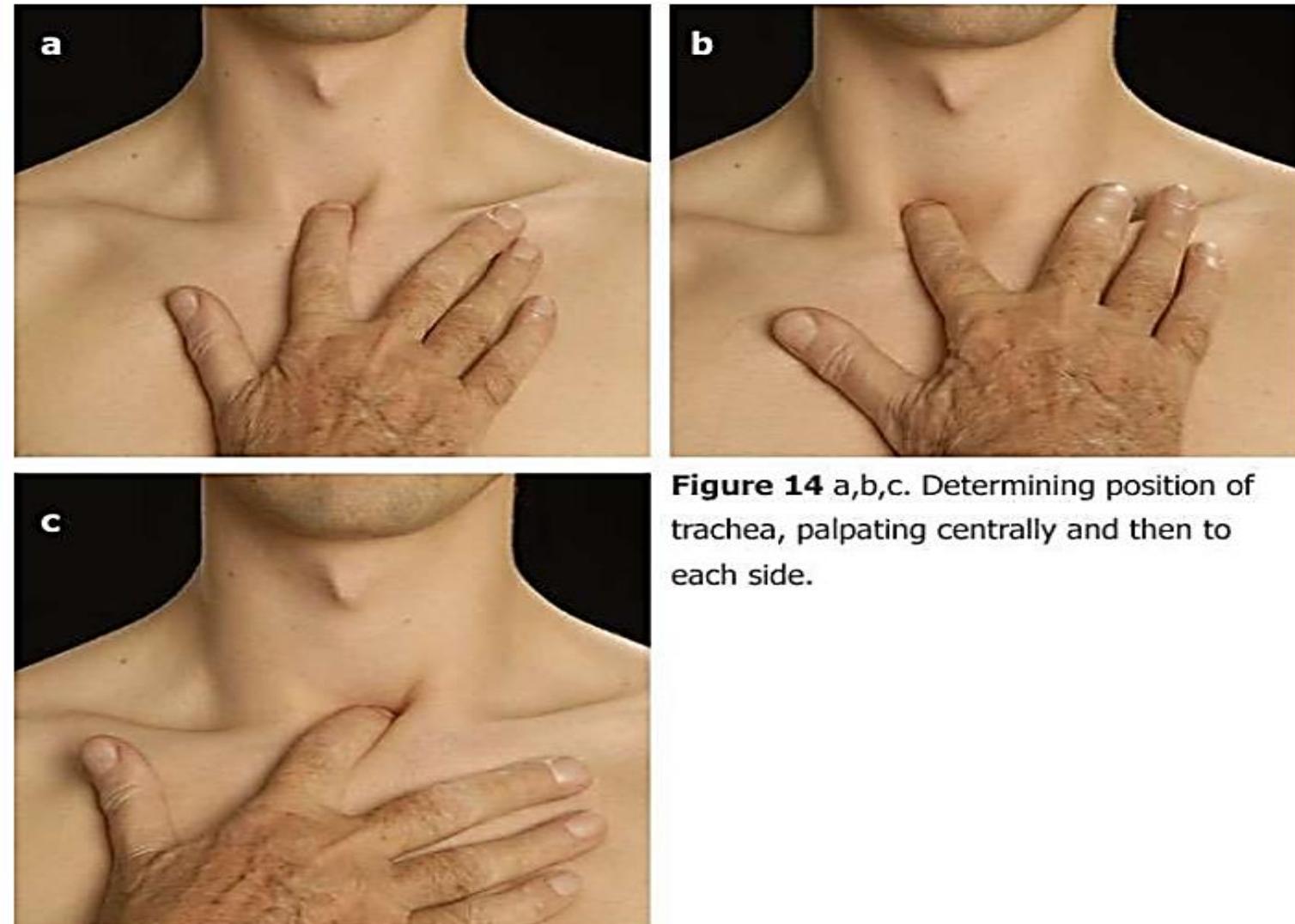
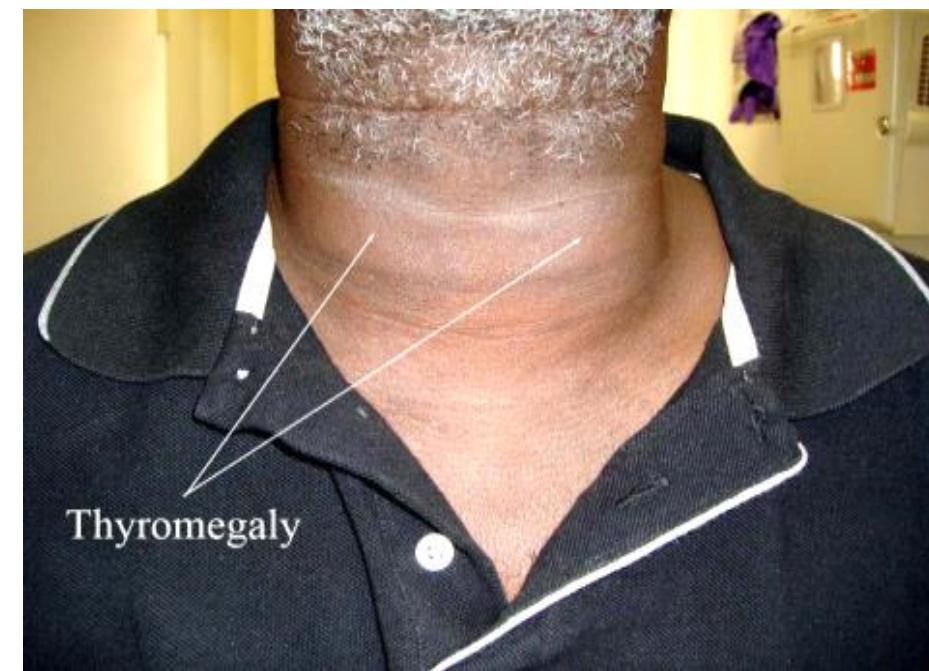
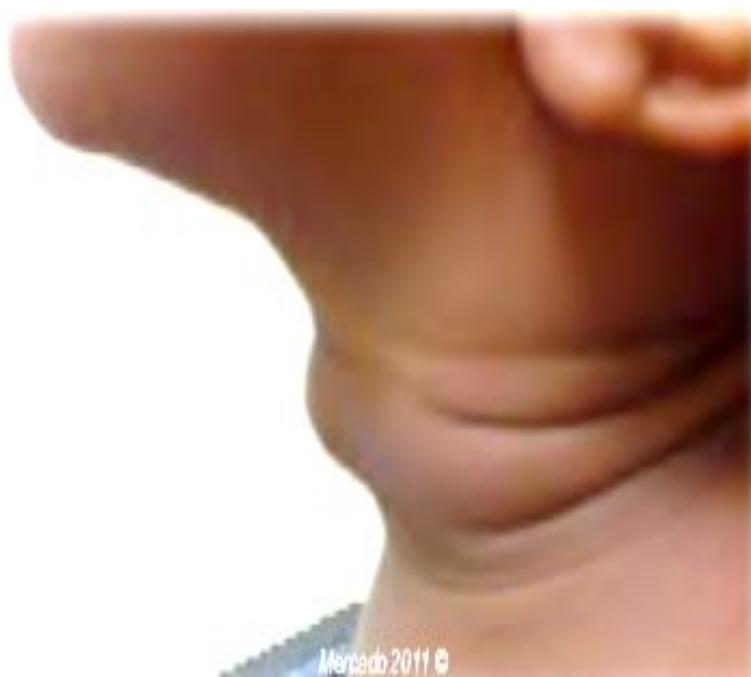
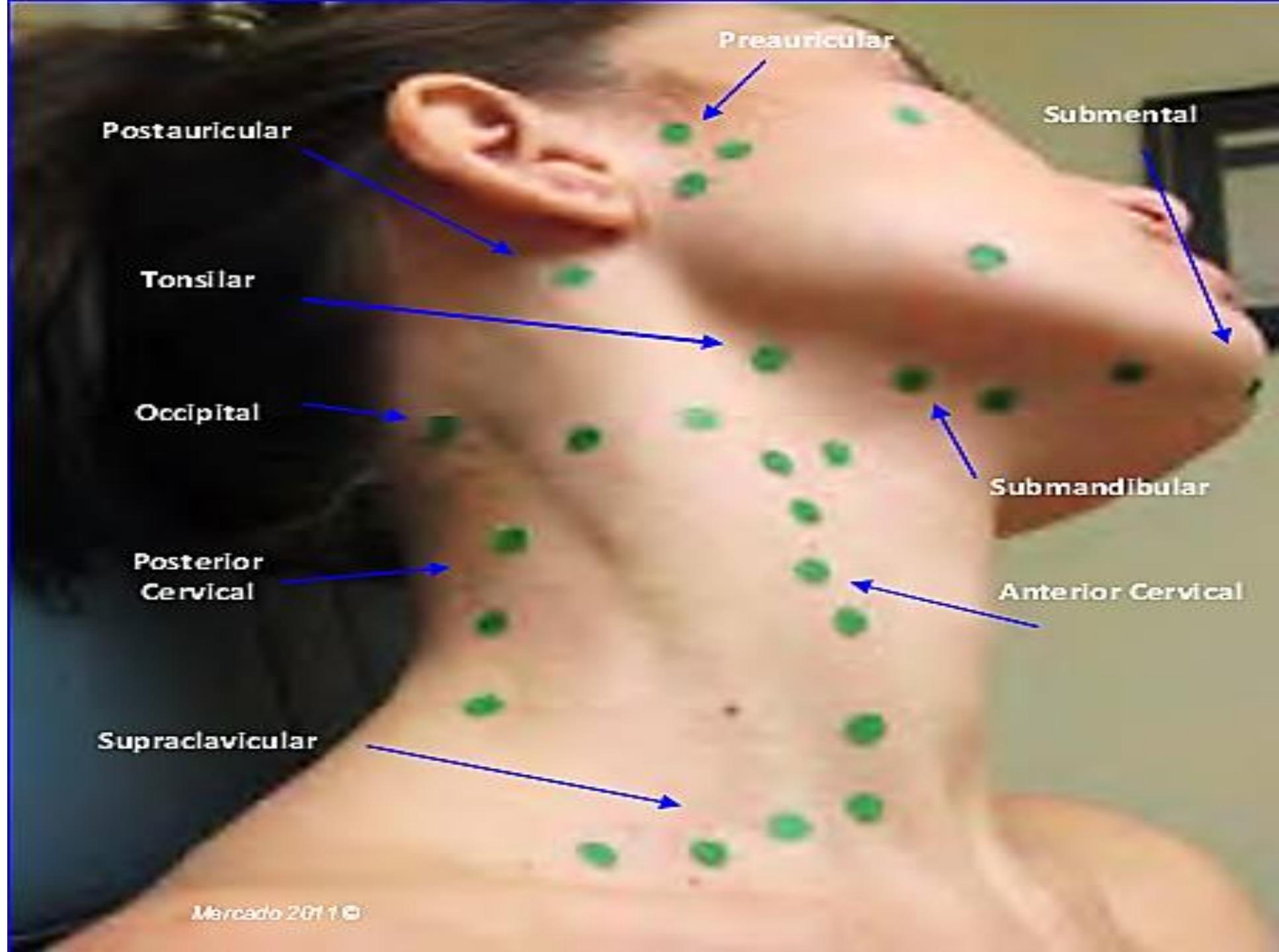
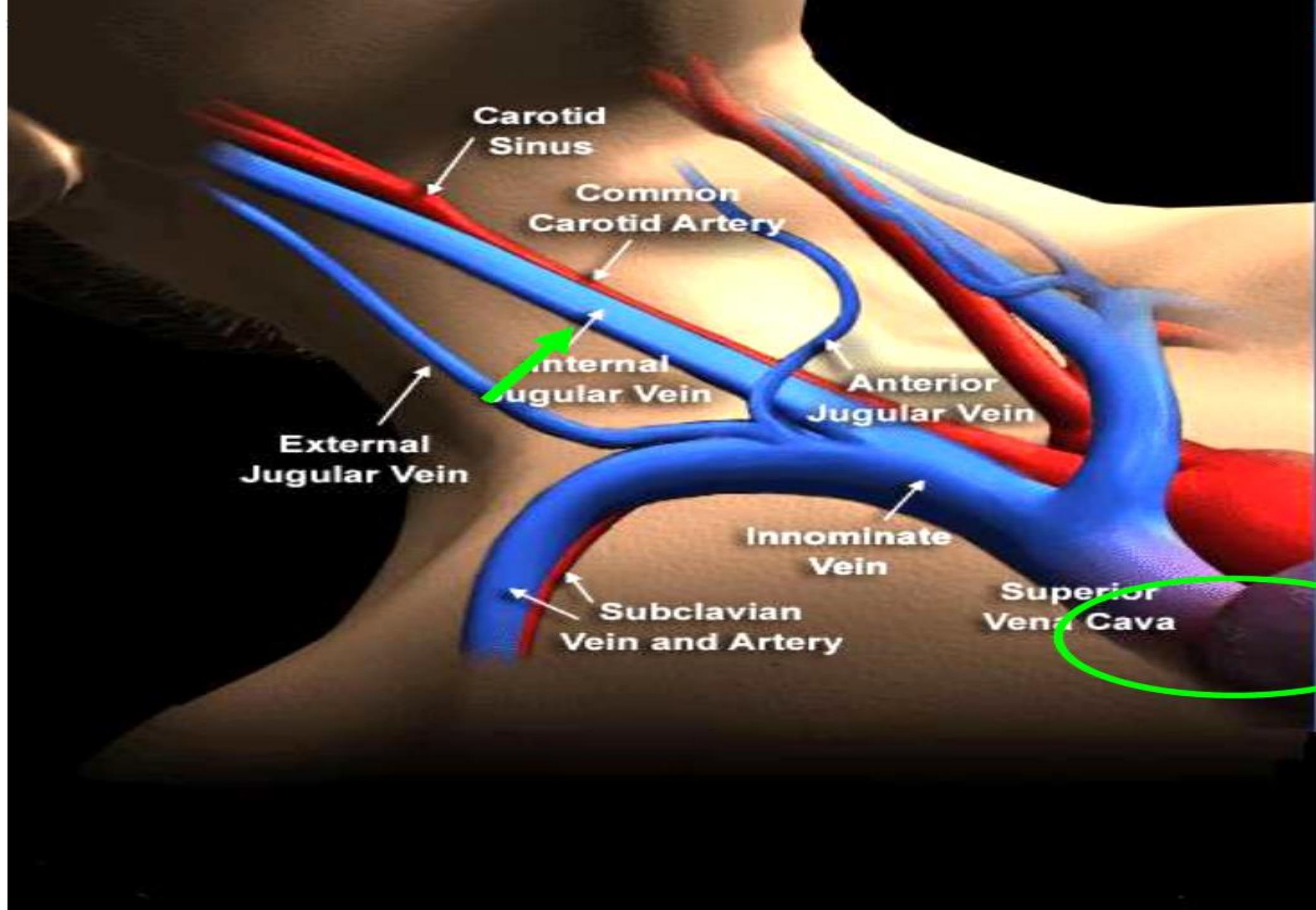


Figure 14 a,b,c. Determining position of trachea, palpating centrally and then to each side.

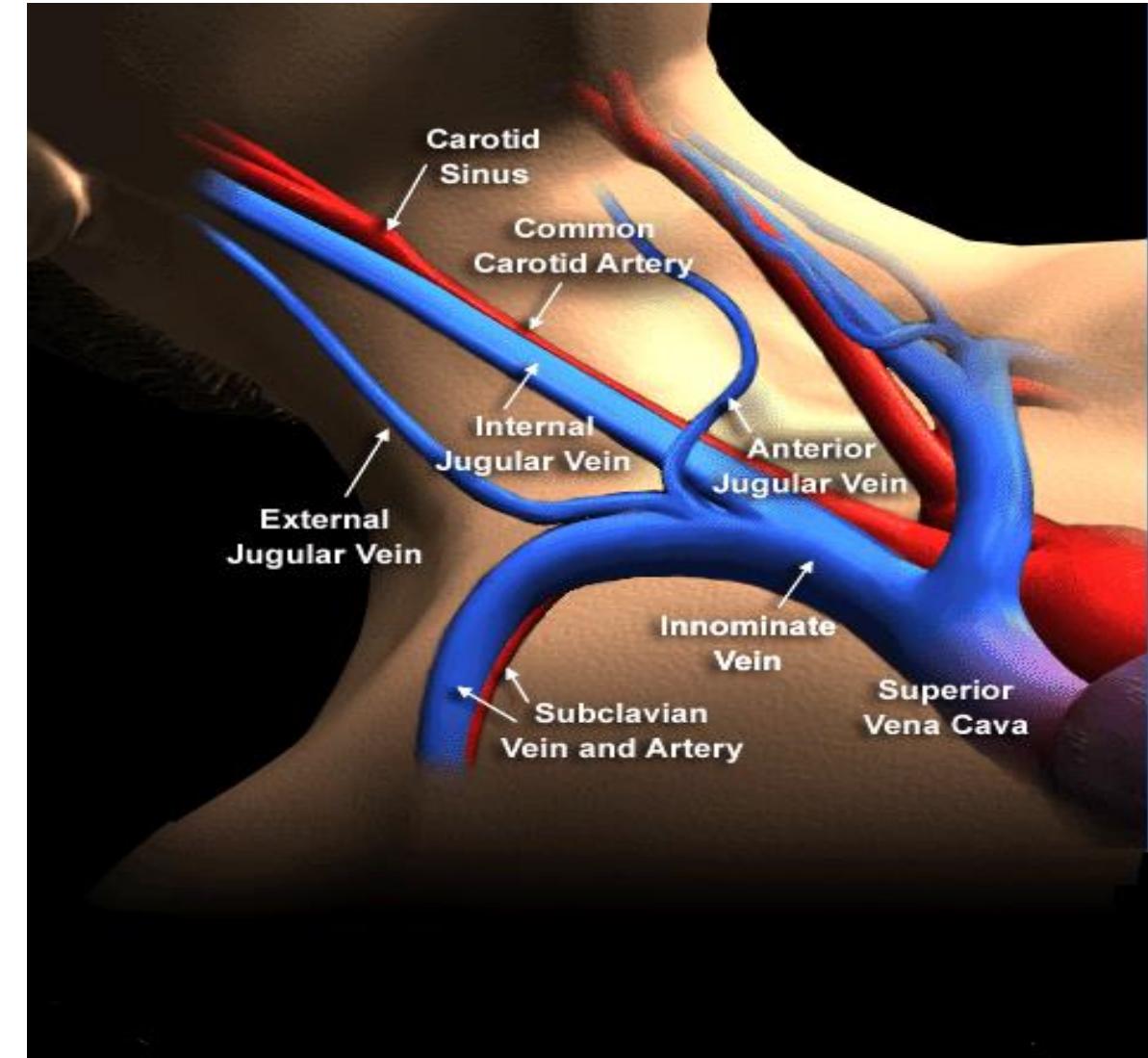








JVP Inspection



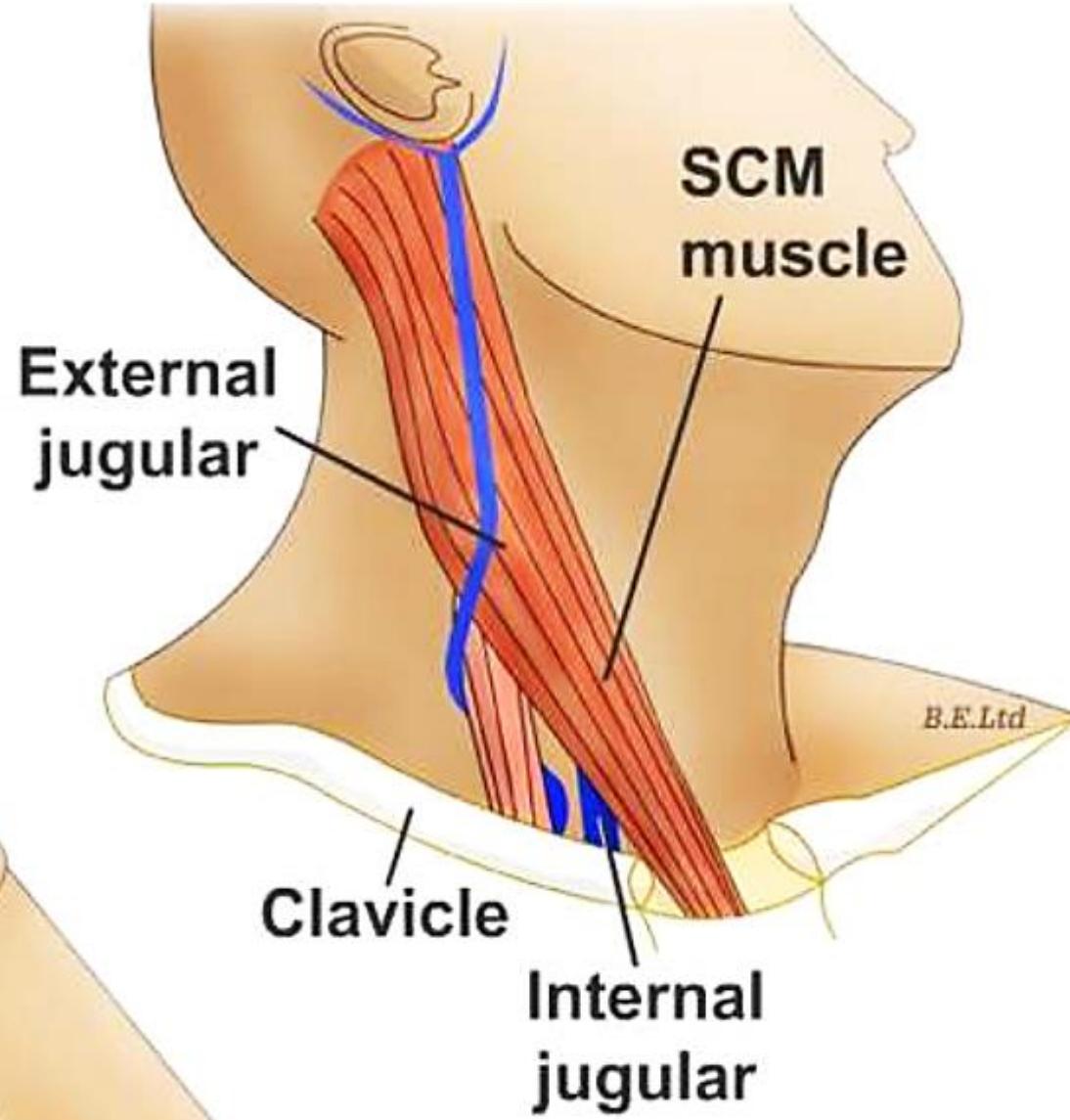
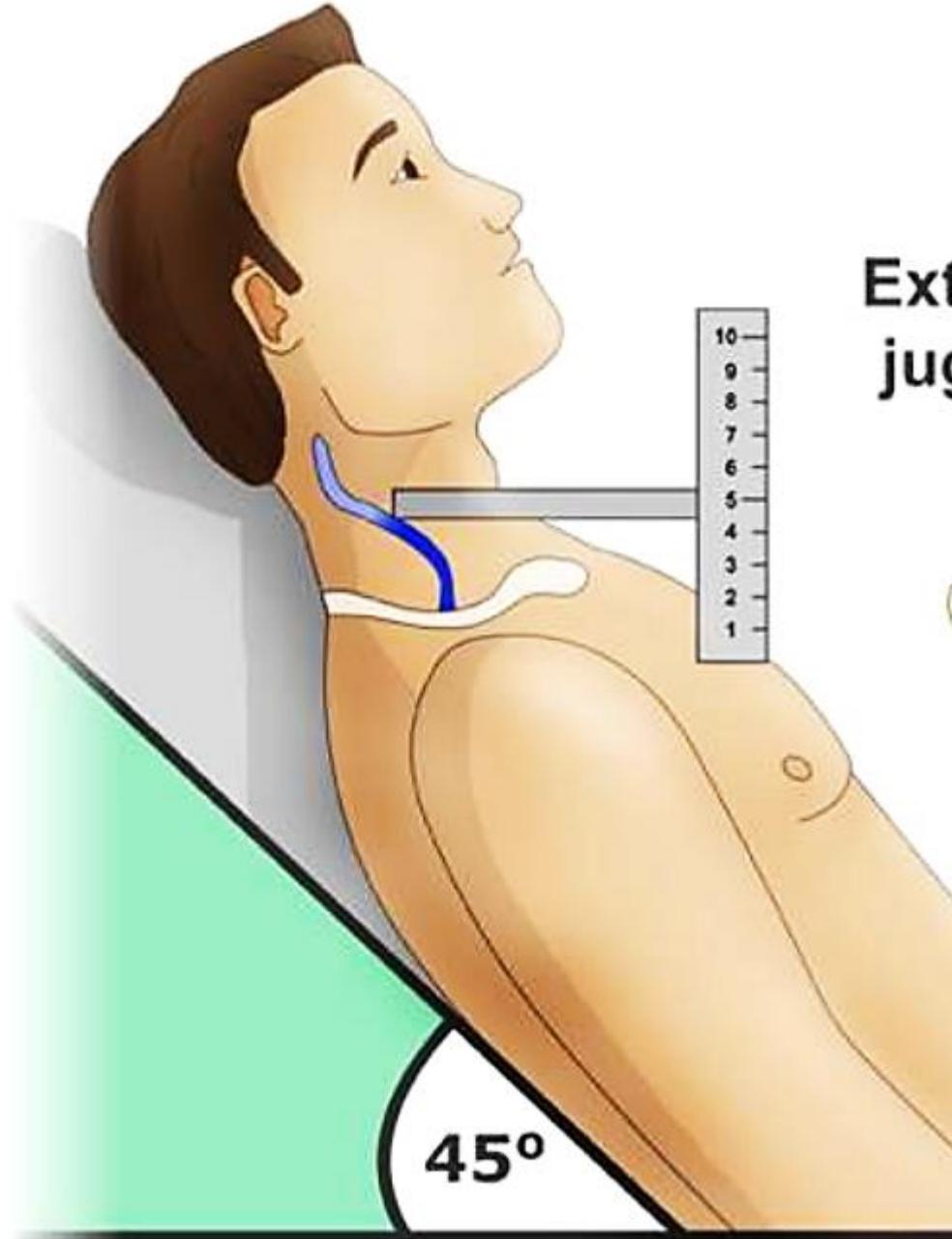
**External
Jugular Vein**

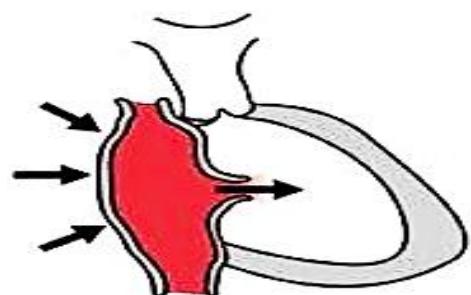
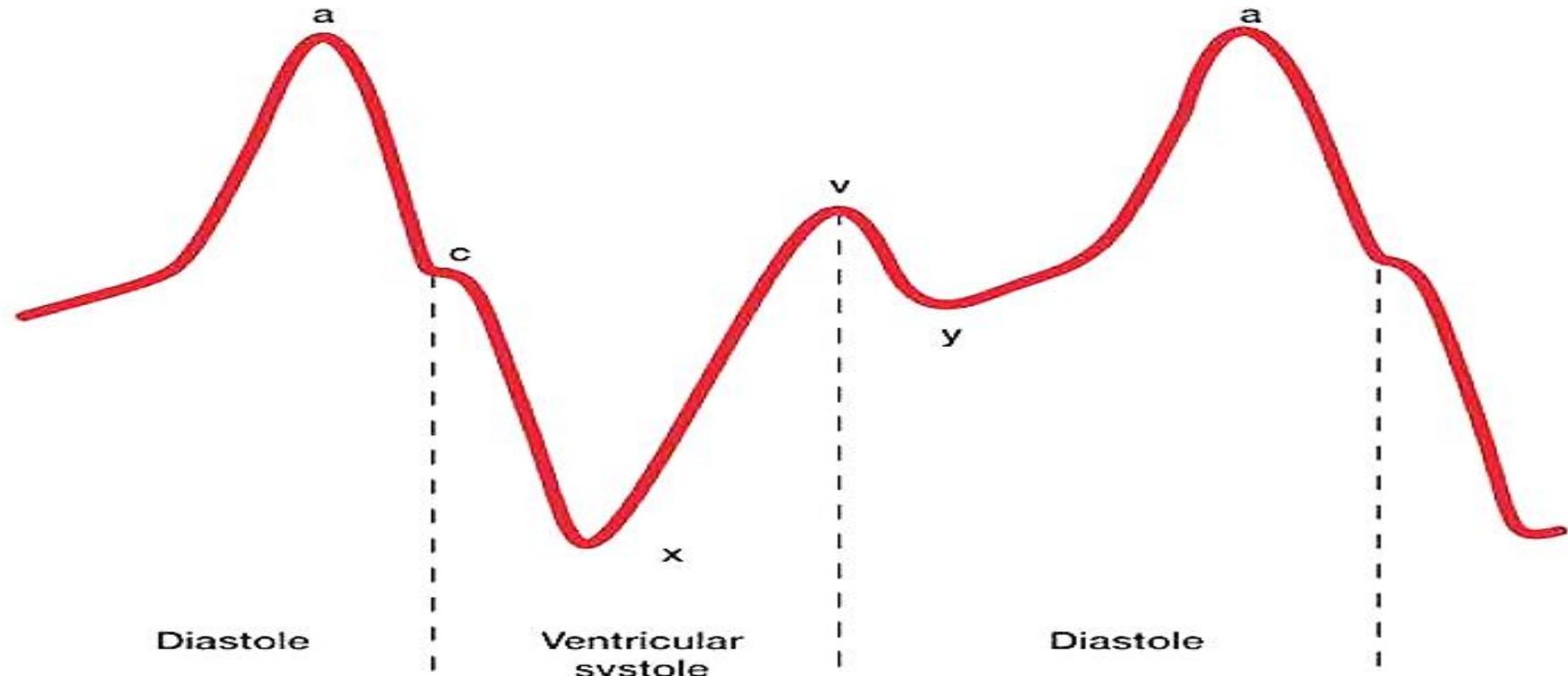
Path of IJ

**Clavicular
Head of SCM**

Clavicle

Sternal Head of SCM

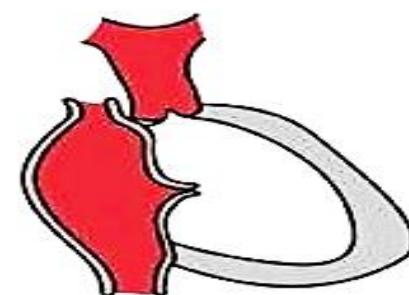




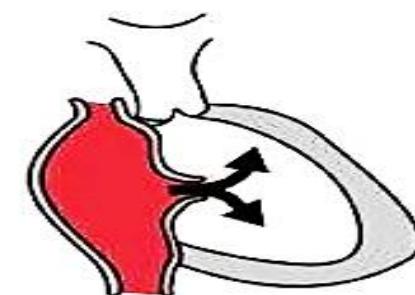
a wave
Atrium contracting
tricuspid valve open



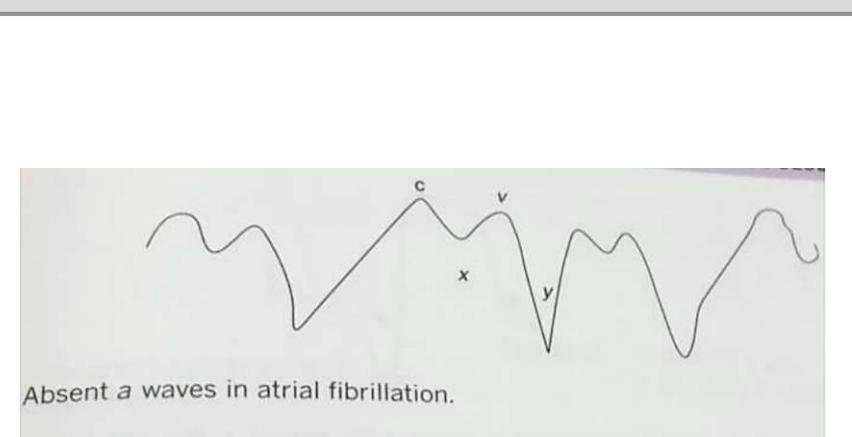
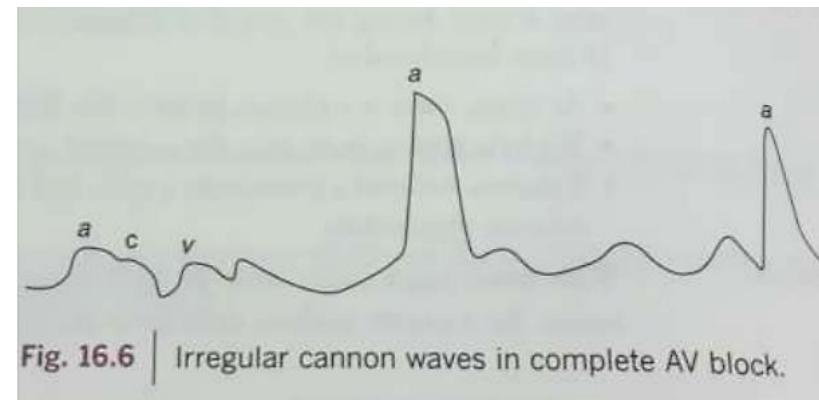
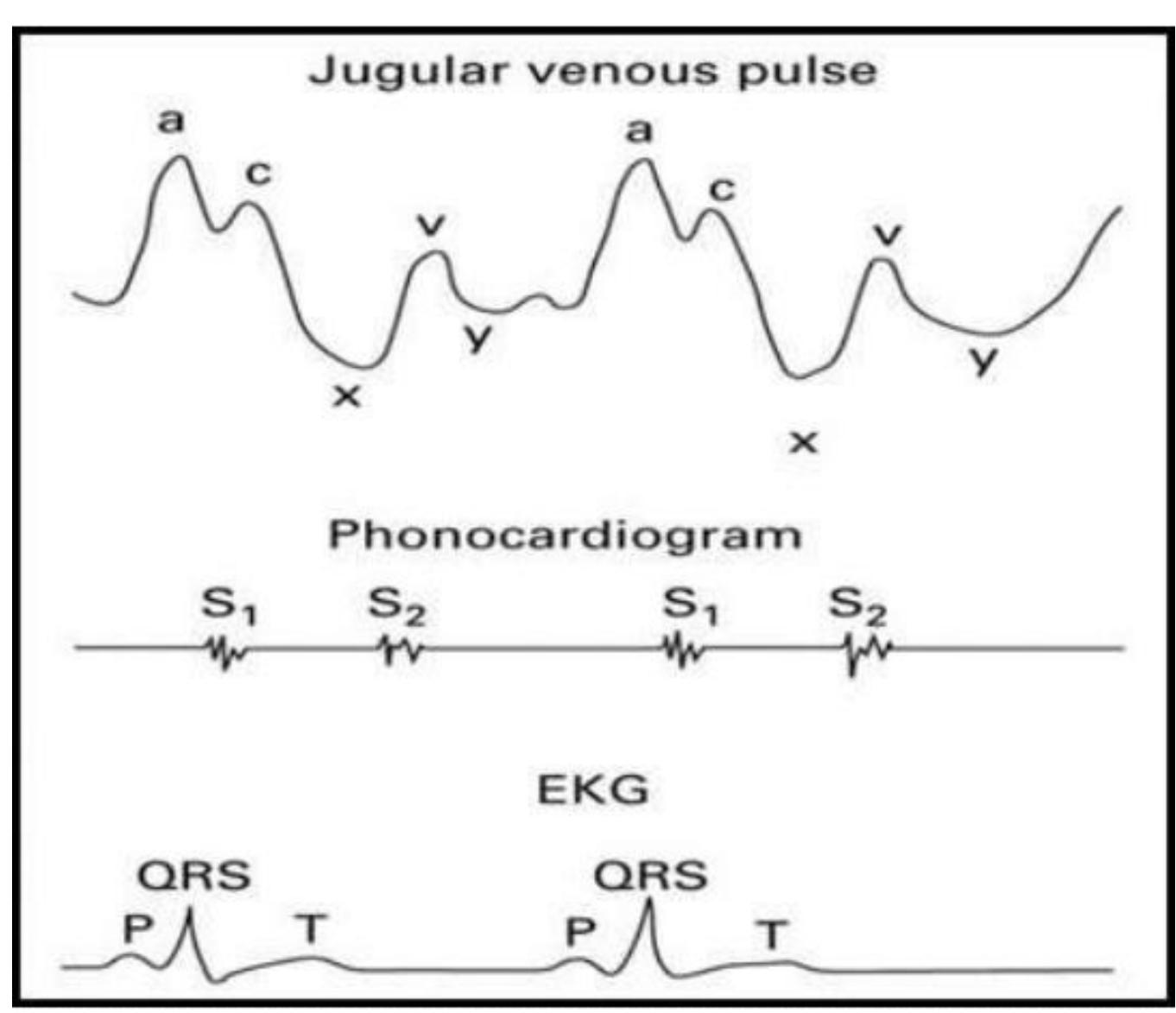
x descent
Atrium relaxing then
filling, tricuspid
closed

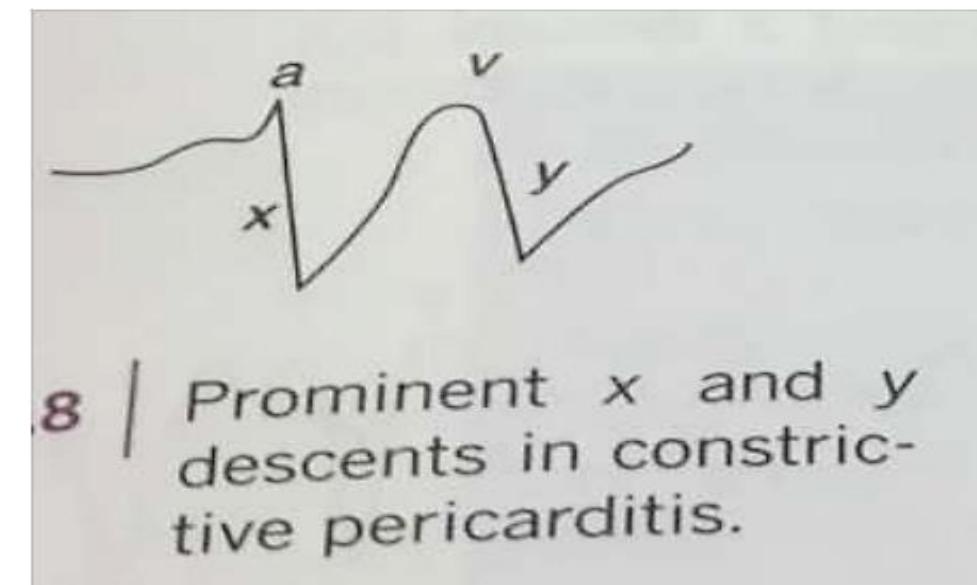
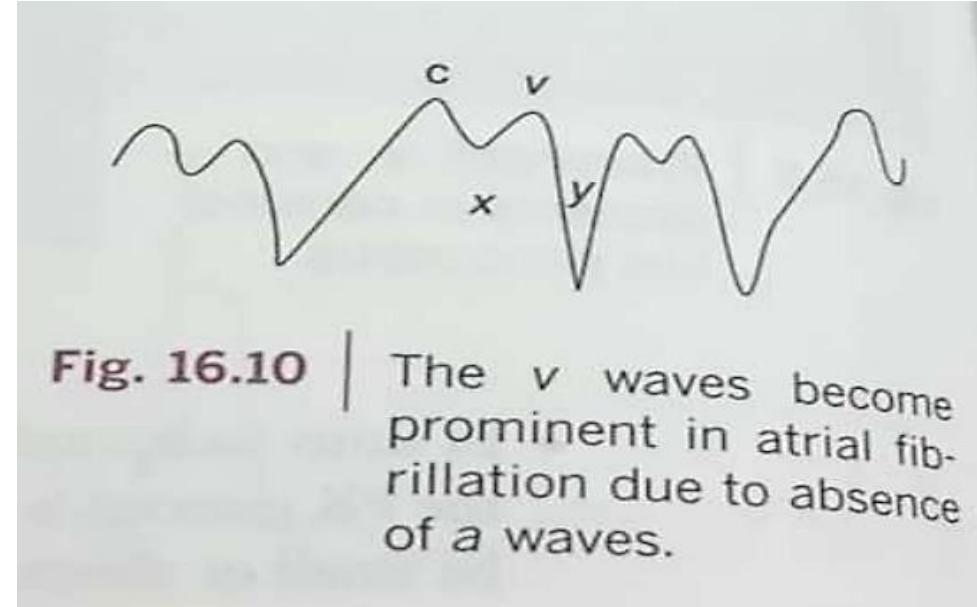
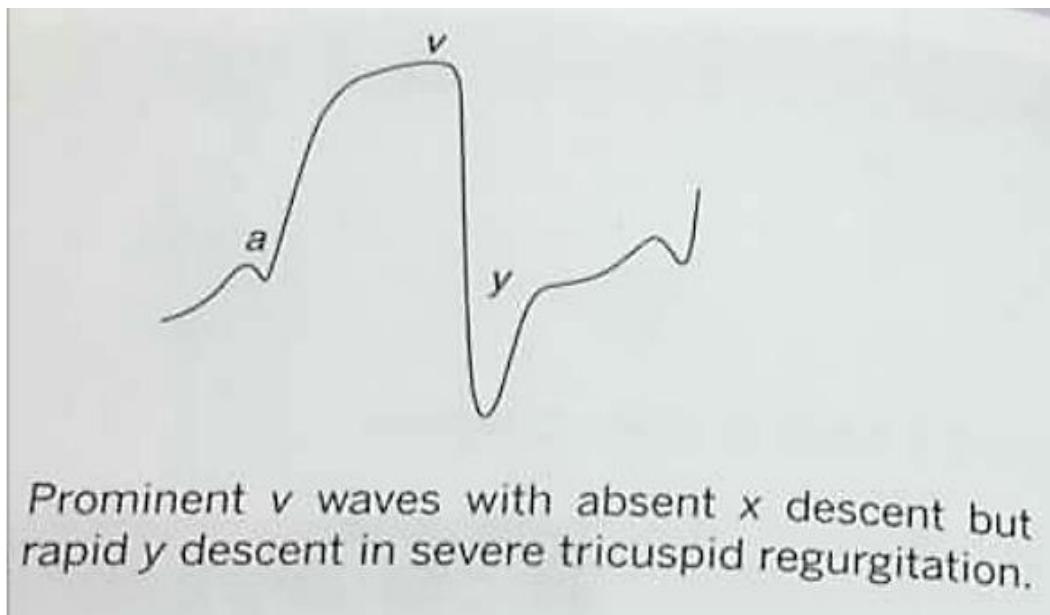
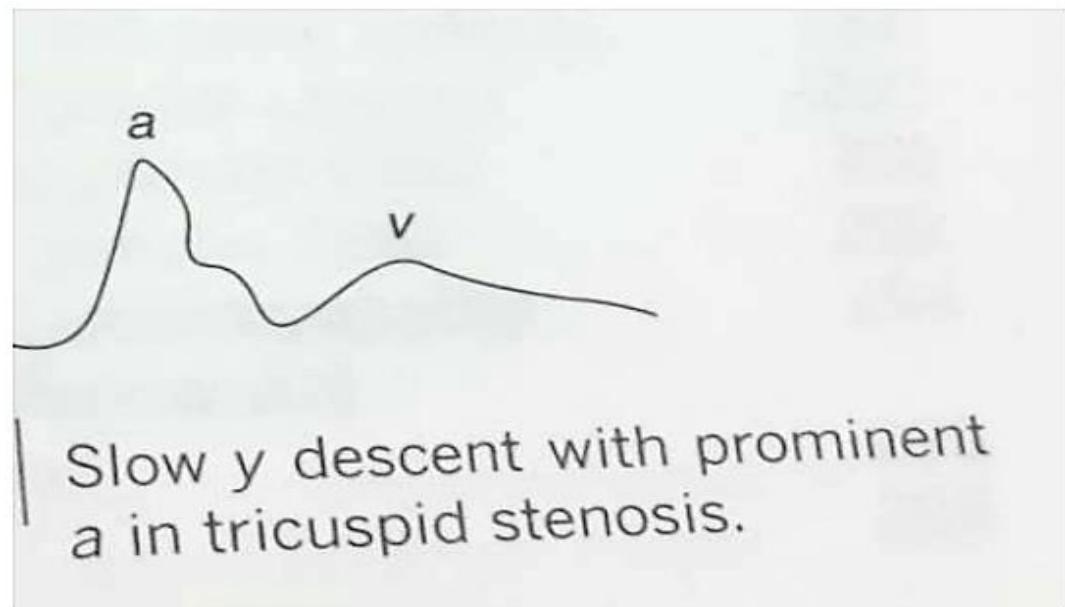


v wave
Atrium tense, full;
tricuspid closed



y descent
Atrium emptying,
tricuspid open







Abnormalities of the jugular venous pulse

The A Wave:

1. Large or giant A waves:

* T.S. * P.S. * P++ "

2. Absent A seen in atrial fibrillation.

3. Canon A waves? Occur in cases of complete heart block and PVT.

X Descent: (Systolic collapse)1

It is obliterated in T.I.

V Wave

It is large and prominent in T.I and right sided heart failure.

Y Descent (Diastolic collapse)

* Shallow Y descent in T.S.

* It is deepest in constrictive pericarditis.

Causes of congested neck veins: (high venous pressure)

1. Non pulsating.

- a- S.V.C. obstruction due to thrombosis.
- b- Some cases of constrictive pericarditis (Le. leading to SVC obstruction).
- c- Full venous column!?

2. Pulsating

- 1) Right sided heart failure, is the commonest.
- 2) Tricuspid valve disease as T.I. & T.S.
- 3) Increased intrapericardial pressure.
 - a- Pericardial effusion. b- Constrictive pericarditis.
- 4) Increased intrathorasic pressure:
 - a- Massive pleural effusion. b- Tension pneumothorax. c- Emphysema.
- 5) Increased intra-abdominal pressure:
 - a- Tense ascites. b- Pregnancy. c- Huge abdominal swelling.





