

# Introduction

This book is a part of my trial to collect and expand MCQ's, The part available now includes MCQ's. I will update the next edition and I will be happy to receive any suggestions and any more questions to enrich this electronic free book.

د مسعد السيسي



#### ANATOMY AND PHYSIOLOGY

#### 1- The first visceral cleft gives all of the following except

- a- outer layer of the tympanic membrane
- b- the auricle.
- c- the external auditory canal.
- d- the fibrous layer of the tympanic membrane

#### 2-The first visceral arch gives all of the following except

- a- outer layer of the tympanic membrane
- b- malleus.
- c- incus.
- d- the fibrous layer of the tympanic membrane

#### 3-The stapes bone develops from

- a- first visceral arch.
- b- second visceral arch.
- c- the otic capsule.
- d- Both b & c are right.
- e- Both a & b are right.

#### 4-The inner ear is ebmbryologically derived from

- a- Ectoderm
- b- Entoderm.
- c- Mesoderm.
- d- all of the above

#### 5-A poorly developed anihelix and overdeveloped conchal cartilage are characteristic of:

- a- Darwin's tubercle.
- b- Microtia.
- c- Bat ear.
- d- Cauliflower ear.
- e- Congenital syphilis.

#### 6-The length of the bony external canal of adult person is approximately

- a- 8 mm.
- b- 12 mm.
- c- 16 mm.
- d- 24 mm.

#### 7-The tympanic membrane takes its innervations from

- a- V cranial nerve
- b- X cranial nerve
- c- XI cranial nerve
- d- All of the above
- e- Both a and b are true

#### 8-The auriculo temporal nerve

- a- supplies the skin of the upper 2/3 of the lateral surface of the auricle
- b- is a branch of maxillary nerve
- c- supplies the middle ear mucosa through the tympanic plexus
- d- non of the above.

#### 9-The lobule of the ear has its sensory innervation from

- a- great auricular nerve
- **b-** auriculotemporal nerve
- c- arnold branch of vagus nerve
- d- facial nerve

#### 10-The tympanic membrane is divided into:

- a- Two equal parts called pars tensa and pars flaccida
- b- A major upper part called pars flaccida and a small lower part called pars tensa
- c- A small upper part called pars flaccida and a major lower part called pars tensa
- d- non of the above

#### 11-The bulge seen on the medial wall of the middle ear is

- a- formed by the bony semicircul canal.
- b- known as the promontory.
- c- is formed by the basal turn of the bony cochlea
- d- all of the above
- e- both a and b are true
- f- both b and c are true.

#### 12-The oval window

- a- Lies below and behind the promontory
- b- Is closed by secondary tympanic membrane
- c- Leads to the scala tympani of the cochlea
- d- Is Closed by foot plate of stapes

#### 13-In the adult, the Eustachian tube is approximately the following length

- a- 30 mm
- b- 20 mm
- c- 36 mm
- d- 45 mm

#### 14-The Eustachian tube is opened by contraction of

- a- tensor tympani muscle
- b- levator palati muscle
- c- tensor palati muscle
- d- Salpingopharyngeus muscle

#### 15-The Eustachian tube

- a- opens in the lateral wall of the oropharynx
- b- is opened by the levator palati muscle
- c- wider in the adult than in infants
- d- non of the above
- e- all of the above.

#### 16-In the adult, the bony part of the Eustachian tube is approximately the following length

- a- 30 mm.
- b- 12 mm.
- c- 36 mm.
- d- 45 mm.

#### 17-The internal carotid artery comes in relation to which wall of the middle ear

- a- Anterior wall
- b- Roof
- c- Inferior wall
- d- Posterior wall.

#### 18-The sensory end-organ of the semicircular canal is

- a- the organ of Corti
- b- the macula

- c- the crista
- d- non of the above

#### 19- Which of the following structures does not pass through the internal auditory meatus

- a- VII cranial nerve
- b- VIII cranial nerve
- c- Chorda tympani nerve.
- d- Internal auditory artery.

#### 20-The ratio of the functioning area of the tympanic membrane to the foot plate of stapes is

- a- 15:1
- b- 17:1
- c- 23:1
- d- 1:10

#### 21-The sensory end-organ of the coclea is

- a- the organ of Corti
- b- the macula
- c- the crista
- d- non of the above

#### 22-The content of the membranous labyrinth is

- a- Endolymph
- b- Perilymph
- c- CSF
- d- All.

Which of the following cranial nerves does not provide sensory nerve supply to the auricle and external auditory canal?

- a- V cranial nerve
- b- VII cranial nerve
- c- IX cranial nerve
- d- X cranial nerve

#### 23- McEwen's triangle is the surface landmark of:

- **a-**T he tympanic part of the facial nerve.
- b- Mastoid antrum.
- **c-** Dome of the lateral semicircular canal.
- d-Icudo-stapedial joint.

#### 24-The concept that the facial nerve supplies the auricle is related to:

- a. Ramsy-Hunt syndrome.
- b. Jugular foramen syndrome.
- c. Horner's syndrome.
- d. Bell's palsy.

#### 25- The internal auditory canal

- a- Connects the cerebell-pontine angle to the middle ear.
- b- is 24 mm long
- c- Contains the facial nerve and VIII nerve
- d- Directed downwards, forwards and laterally

#### EAR EXAMINATION

#### 1- During ear examination the reservoir sign is diagnostic of

- a- acute otitis media
- b- mastoiditis
- c- Petrositis.
- d- All of the above.

#### 2- Greisinger's sign means:

- a- Pain over the tempromandibular joint
- b- Pain in the eye.
- c- Pain and tenderness over the posterior part of the mastoid.
- d- Pain and tenderness over the auricle.

#### 3- Griessinger's sign is positive in:

- a- Acute petrositis.
- b- Acute sinusitis.
- c- Acute labyrinthitis.
- d- Lateral sinus thromophelbitis

#### 4- Retracted drum is characterized by all the following except:

- **a-** Disturbed cone of light.
- **b-** Prominent malleolar folds
- c- Decreased drum mobility.
- **d-** Central drum perforation

#### 5- The tuning fork tests

- a- are used to assess the degree of hearing loss.
- b- Help to differentiate between conductive and sensori-neural hearing loss.
- c- Both a and b are true
- d- are not used nowadays and replaced by audiometry..

#### 6- In a normally hearing person

- a- Rinne's test is negative.
- b- Air conduction is better than Bone conduction.
- c- Air conduction is equal to bone conduction
- d- None of the above.

#### 7- Rinne's test for the left ear is negative in

- a- Left Conductive deafness.
- b- left severe sensorineural deafness.
- c- Bilateral conductive deafness.
- d- All of the above

#### 8- Weber's test compares

- a- Air conduction in both ears.
- b- Bone conduction of both ears.
- c- Air conduction and bone conduction in one ear
- d- Bone conduction of patient and the examiner.

#### 9- In a patient with right conductive deafness, the sound of the tuning fork placed on the forehead is

- a- Lateralized to the left side.
- b- Lateralized to the right side.
- c- Sound is equally heard in both ears.
- d- None of the above.

#### 10- Rinne's test is negative in all of the following except

- a- Stapedial Otosclerosis
- b- Wax impaction.
- c- Ossicular disruption
- d- Menier's disease.

#### 11-The objective method for diagnosis of conductive hearing loss is:

- a- Pure tone audiometry.
- b- Speech audiometry.
- c- Tympanometry.
- d- Auditory brain stem response.
- e- Tunning fork tests.

#### 12-The objective method for diagnosis of sensori-neural hearing loss is:

- a- Pure tone audiometry.
- b- Speech audiometry.
- c- Tympanometry.
- d- Auditory brain stem response.

### 13- The landmarks of the tympanic membrane on clinical examination include all of the following except

- a- The cone of light.
- b- The tympanic annulus
- c- The handle of malleus.
- d- The foot plate of stapes.

#### 14-Vertigo and nystagmus induced by pressure on the tragus is diagnostic of

- a- serous labyrinthitis
- b- circumscribed per- labyrintserous
- C- suppurative labyrinthitishitis
- d- all of the above

#### 15- A positive fistula test is diagnostic of

- a- serous labyrinthitis.
- b- circumscribed peri-labyrintserous.
- c- suppurative labyrinthitis.
- d- Oro-antral fistula.

#### 16-Type c tympanogram is consistent with

- a- secretory otitis media
- b- otosclerosis
- c- Eustachian tube dysfunction
- d- Ossicular discontinuity.

#### 17- the expected type of tympanogram in secretory otitis media is

- a- Type A
- b- Type B
- c- Type C
- d- Type As
- e- Type Ad

### 18- in 40 years female patient with left hearing loss, rinne test is negative on the left side and tympanogram is type As, your diagnosis is

- a- Lefr secretory otitis media.
- b- Left otosclerosis.

- c- Left tympanosclerosis
- d- All are true.

### 19- On ear examination a red mass red seen behind the tympanic membrane which blanches on compression by pneumatic otoscope. This sign is called

- a- Griesinger's sign
- b- Schwartz sign
- c- Brown's sign
- d- Moor's sign.

#### 20- Fever in lateral sinus thrombosis is usually:

- b. Intermittent.
- c. Remittent.
- d. Low grade.
- e. High grade.

#### 21- The discharge in case of cholesteatoma is:

- a. Copious purulent.
- b. Copious offensive.
- c. Scanty offensive.
- d. Thick scanty creamy.

#### 22- which one is true about pure tone audiometry:

- a- It gives the amount of the hearing loss in dB.
- b- It gives the type of deafness.
- c- It gives the possible cause of deafness.
- d- It helps in hearing aid selection.
- e- It helps in follow up of the case.
- f- It measures the sound emitted from the cochlea.

#### 23-which one is true about impedance audiometry:

- **a-** It measures the pressure changes in the middle ear.
- b- It measures fixation and dislocation of the ossicular chain.
- c- It measures the patency of the Eustachian tube.
- d- It measures the sound emitted from the cochlea.

#### 24. The test of hearing in infants is:

- a. Rinne test.
- b. Weber test.
- c. Pure tone audiometry.
- d. ABR "Auditory Brain stem Response".

#### 25. ABR "Auditory Brain stem Response" is used in:

- a. Test of hearing in malingering.
- b. Test of hearing in retrochoclear lesion.
- c. Detection of acoustic neuroma.

d. All of the above.

#### 26. Which is not true about CSF examination in case of meningitis:

- a. Protein diminished.
- b. Sugar diminished...
- c. Cell count increased.
- d. pressure increased.

#### 27. A false +ve fistula test is due to:

- a. Labyrinthine fistula with dead ear.
- b. Cholesteatoma bridging an inner ear fistula.
- c. Hyper mobile footplate of the stapes.
- d. All of the above.

#### 28- Reservoir sign is positive in:

- a- Acute petrositis
- b- Chronic labyrinthitis
- c- Acute mastoiditis
- d- Cholesteatoma.

#### 29- By central drum perforation we mean:

- a- perforation at the central part of the drum
- b- a perforation in the pars tensa which is surrounded by a rim of tympanic membrane
- c- a perforation of the pars flaccida
- d- a perforation in the pars tensa which is not surrounded by a rim of tympanic membrane

#### 3- INFLAMMATORY CONDITIONS

#### 1-The causative organism in ear fruncle is

- a- **proteus**
- b- Pseudomonas
- c- Staph. Aeureus
- d- E coli.

#### 2-Malignant otitis externa is

- a- truly malignant disease eroding the external canal
- b- is most commonly seen in elderly uncontrolled diabetics
- c- staphylococcus aureus is the causative organism
- d- non of the above

#### 3- Itching of the ear is a charecteritic symptom of:

- a- Cholesteatoma
- b- Acute suppurative otitis media

- c- Otosclerosis..
- d- Otomycosis

#### 4- The following organisms are involved in acute otitis media except

- a- Streptococcus pneumonia
- b- Hemophilus influenza
- c- Pseudomonas aeroginosa
- **d-** Morexella cararrhalis

#### 5- Throbbing and severe earache is present in the following stage of acute otitis media

- a- stage of salpingitis
- b- stage of catarrhal otitis media
- c- stage of suppurative otitis media
- d- stage of tympanic membrane perforation

#### 6- Most cases of extradural abscess of the temporal lobe

- a- are asymptomatic and discovered accidentally during mastoidectomy.
- b- present with persistent ipsilateral temporal headach.
- c- present with vertigo.
- d- present with pulsating discharge, hearing loss and tinnitus.

#### 7- The type of hearing loss in otosclerosis may be

- a- Conductive.
- b- Sensorineural.
- c- Mixed.
- d- all of the above.

#### 8- The commonest cause of bilateral sensorineural hearing loss in elderly individuals is

- a- cochlear otosclerosis
- b- presbyacusis
- c- diabetes milltus
- d- ototoxicity

### 9-A 30 years old patient with recurrent attacks of vertigo, hearing loss and tinnitus associated with nausea and vomiting has

- a- benign paroxysmal positional vertigo
- b- vestibular neuronitis.
- c- Meniere's disease
- d- acoustic neuroma.

### 10- In a patient having acute suppurative otitis media with bulging drum, myringotomy is benificial to

- a- drain the middle ear
- b- avoid rupture of the tympanic membrane
- c- avoid complications
- d- all of the above

### 11- All of the following may be seen in the tubotympanic type of chronic suppurative otitis media except

- a- mucopurulent otorrhoea
- b- central tympanic membrane perforation
- C- marginal tympanic membrane perforation
- d- profuse otorrhoea

#### 12- Cholesteatoma is characterized by

- a- continuous mucopurulent ear discharge
- b- A foul smelling ear discharge
- C- A central tympanic membrane perforation
- d- non of the above.

#### 13-Intermittent fever with rigors and headache in a patient with cholesteatma may be due to

- a- otogenic meningitis
- b- otogenic brain abscess
- c- lateral sinus thrombophlebitis
- d- extradural abscess

#### 14- A positive Kernig sign means

- a- reflex flexion of the hips and knees when the neck is flexed
- b- inability to extend the knee completely when the hip is flexed on the abdomen
- c- inability to do rapid ulternating movement
- d- non of the above

#### 15- A positive Brudzniski sign means

- a- reflex flexion of the hips and knees when the neck is flexed
- b- inability to extend the knee completely when the hip is flexed on the abdomen
- c- inability to do rapid ulternating movement
- d- non of the above

#### 16- A persistent profuse ear discharge after acute otitis media is

- a- cholesteatoma.
- b- secretory otitis media.
- c- Mastoiditis.
- d- diffuse otitis externa

#### 17- The combination of unilateral otorrhoea, severe facial pain and diplopia is known as

- a- Piere Robin syndrome
- b- Gradenigo's syndrome
- c- Kartagner syndrome
- d- Ramsay Hunt sundrome

### 18- A child with an attic drum perforation who developed nausea, projectile vomiting and fever of 40 degree is suspicious to have got

- a- otogenic meningitis
- b- otogenic labyrinthitis
- **C-** petrositis
- d- mastoiditis

#### 19- In a patient suffering from purulent otorrhoea and attic perforation

- a- treatment is essentially surgical
- b- medical treatment and follow up is sufficient
- c- myringoplasty is the only needed treatment
- d- non of the above

#### 20- Uncontrolled diabetes in elderly patient may predispose to

- a- cholesteatoma
- b- malignant otitis externa
- c- presbyacusis
- d- vestibular neuronitis

### 21- A large near total perforation following acute necrotizing otitis media must be followed up for fear of

- a- recurrent middle ear infection.
- b- secondary acquired cholesteatoma.
- c- retraction pocket.
- d- Tympanosclerosis.

#### 22-In a case of cholesteatoma, sever spontaneous vertigo with Nausea and vomiting is suspicious of

- a- circumscribed peri-labyrinthitis
- b- diffuse serous labyrinthitis

- **C-** extradural abscess
- **d** petrositis

### 23- A child with retraced drum and conductive deafness after inadequate treatment of acute suppurative otitis media is suffering from

- a- chronic tubotympanic otitis media
- b- chronic atticoantral otitis media
- C- otitis media with effusion
- d- all of the above
- e- non of the above

#### 24- Treatment of acute otitis media must continue until

- a- Vomiting stops
- b- Fever becomes normal
- c- Hearing becomes normal
- d- Pain is relieved.

#### 25- An early and diagnostic sign of mastoiditis is :

- a- Reservoir sign.
- b- sagging of the postero-superior part of the bony canal.
- C- perforated tympanic membrane.
- d- post-auricular mastoid abscess.

### 26- A 15 years old patient with right offensive otorrhea, temperature of 35.5 C, left body weakness, severe headache, vomiting, and visual field defects has:

- a- Left Cerebellar abscess
- b- Righr cerebellar abscess
- c- Right temporo-parietal abscess
- d- Left temporoparietal abscess.

### 27- Diplopia on looking to the left side in a patient with a history of bilateral chronic suppurative otitis media is likely due to

- a- right petrositis
- b- left lateral sinus thrombophlebitis.
- c- right petrositis affecting the abducent nerve
- d- left petrositis affecting the abducent nerve

#### 28- Griessinger's sign is positive in:

- a- Acute petrositis
- b- Acute sinusitis
- c- Acute labyrinthitis
- d- Lateral sinus thromophelbitis.

#### 29- Bezold's abscess is a collection of pus

- a- above and in front of the auricle.
- b- behind the auricle.
- c- in the upper part of the neck deep to the sternomastoid.
- d- in the peritonsillar space

#### 30 - Cholesteatmoa causes fistula commonly in:

- a- Promontory
- b- Lateral semicircular canal
- c- Posterior semicircular canal
- d- Stapes footplate

## 31- A 5-year-old child has persistent serous effusions in both ears for 6 months after a routine acute infection. He has a 40-dB conductive hearing loss in both ears and has been having trouble in school. What would be the BEST treatment for this child?

- a- observe the child for another 3 months
- b- prescribe amoxicillin for 10 days
- c- recommend hearing aids
- d- place ventilating tubes
- e- prescribe prophylactic antibiotics for 3 months
- e- cholesteatoma

#### 32-In Gradenigo syndrome diplopia is due to inflammation of the following cranial nerve

- a- IV nerve
- b- V nerve
- c- III Nerve
- d- VI nerve

#### 33- All of the following are diagnostic of tympanic membrane retraction except

- a- fore-shortened handle of malleus.
- b- prominent lateral process of malleus.
- c- Schwartz sign.
- d- distorted cone of light.

#### 34- Extra cranial complications of chronic suppurative otitis media includes:

- a- Mastoiditis...
- **b-** Bezold abscess..
- **c-** Lateral sinus thrombosis.
- d- Otitis externa.

#### 35- CSF examination in case of meningitis shows:

- a- Protein diminished.
- b- Sugar diminished.
- c- Chloride diminished.
- d-Cell count increased.
- e-a, b & c.
- f-b, c & d.

### 36- A patient with long standing left otorrhea presented with persistent left temporal headache, the diagnosis may be

- a- migraine.
- **b-** mastoiditis
- **c-** extradural abscess.
- **d-** meningitis.

#### 37- The tympanic membrane perforation in acute otitis media is

- a- central in the pars tensa
- b- marginal in the pars tensa
- c- small in the pars flaccida
- d- non of the above.

#### 4-Traumatic conditions

#### 1- In otitic barotrauma, the following statements are correct except

- a- occurs during airplane ascent
- b- occurs during airplane rapid descent
- c- can cause rupture of the tympanic membrane
- d- occurs during diving.

#### 2- Auricular hematoma

- a- may be complicated by otitis externa
- b- cauliflower ear is one of its complications.
- c- evacuation of the extra-vasated blood is not essential
- d- all of the above

Answer: b. Auricular hematoma may be complicated by perichondritis and cauliflower ear.

Evacuation of the extra-vasated blood is essential to avoid complications.

#### 3- A slippery foreign body in the external canal must not be removed by forceps because

a- It may slipper deeper in the external canal

- b- It may injure the tympanic membrane during its removal
- c- It is usually difficult to grasp and remove by this method
- d- All of the above.

#### 4- An impacted seed in the external canal is best removed by

- a- Ear wash
- b- Suction
- c- Hook
- d- Non of the above.

#### 5- Longitudinal temporal bone fracture :

- a- is less common than the transverse type
- b- is usually associated with sensori-neural hearing loss
- c- facial nerve paralysis is a common association with this type
- d- non of the above

#### 6- Conductive deafness in longtudinal temporal bone fracture may be due to:

- a- Rupture of the tympanic membrane
- b- Ossicular disruption.
- **C-** Non of the above.
- d- Both 1 and 2

#### 7- In traumatic rupture of the drum, which of the following is true:

- **a-** The main treatment is conservative.
- b- Local ear drops are highly indicated.
- C- It usually heals spontaneously within 3 months.
- d- Myringoplasty is the first line of treatment.

#### 5- Facial nerve paralysis

### 1- After mastoidectomy operation, facial nerve paralysis was observed after recovery from anesthesia.

- a- steroids and follow up are only required.
- b- Immediate surgical exploration is needed.
- c- Surgical exploration is made after electro diagnostic tests.
- d- Giving steroids and removing the ear pack is usually successful.

### 2- In lower motor neurone facial paralysis with normal Schirmer test and loss of taste sensation at the anterior 2/3 of the tongue, the level of the lesion is

- a- in the internal auditory canal
- b- in the horizontal tympanic part
- c- at the Geniculate ganglion
- d- in the stylomastoid foramen.

#### 3- In upper motor neurone facial paralysis

- a- the upper part of the face is spared
- b- the lower part of the face is spared
- c- both upper half and lower half are paralyzed
- d- hypotonia of facial muscles is characteristic of this type.

### 4- A patient has sustained a fracture of the skull base. Thorough examination concludes that the greater superfacial petrosal nerve has been injured. The conclusion was based on

- a- partial dryness of the mouth due to lack of salivary secretion from the submandibular and sublingual gland.
- b- partial dryness of the mouth due to lack of salivary secretion from the parotid gland.
- c- Dryness of the cornea due to lack of lacrimal secretion.
- d- Loss of taste sensation from the anterior 2/3 of the tongue.

### 5- In lower motor neurone facial paralysis with intact taste sensation at the anterior 2/3 of the tongue, the level of the lesion is

- a- in the internal auditory canal
- b- in the horizontal tympanic part
- c- in the vertical part above the stapes
- d- in the stylomastoid foramen

#### 6- Failure to close the eye voluntarily is a symptom of

- a- paralysis of the trigeminal nerve
- b- upper motor neurone facial paralysis
- c- lower motor neurone facial paralysis
- d- non of the above

#### 7- In lesion of the facial nerve at the stylomastoid foramen, there is:

- **a-** L.M.N.L of the facial muscles.
- **b-** No impairment of taste.
- **c-** No impairment of salivation.
- **d-** No impairment of lacrimation.
- **e-** All of the above.

#### 8-The cause of Bell's palsy may be one of the following except:

- **a-** Vascular ischemia.
- b- Virus infection.
- c- Bacterial infection.
- d- Auto immune.

#### 9- The early symptom of Bell's palsy is:

- a- Dropping of angle of the affected side.
- b- Obliteration of the angle of the mouth.
- c- Pain of acute onset behind the ear.
- d- Inability to close the eye.

#### 10-The pathology in case of Bell's palsy is:

- **a-** Facial nerve tumor.
- **b-** Cut in the tympanic segment in the facial nerve.
- **c-** Edema of the facial nerve inside its bony canal.
- **d-** Hemorrhage in the facial nerve nucleus.

#### 11-The most accurate diagnostic test to detect degeneration of the facial nerve:

- **a-** Nerve excitability test.
- **b-** Electromyography.
- **c-** Electroneurography.
- d- Stapedial reflex.

#### 12- The most common cause of Bell's palsy is:

- a- Trauma to the temporal bone
- b- Cholesteatoma
- c- Glomus tympanicus
- d- Idiopathic.

#### 13- In Injury of the facial nerve at the horizontal tympanic part

- a- the facial muscles are paralyzed at the opposite side
- b- lacrimation is affected at the same side
- c- salivation is affected at the same side
- d- all of the above.

#### 14- A patient with facial nerve paralysis suffers intolerance of loud sound due to

denervation of which muscle

- a- posterior belly of digastrics
- b- tensor tympani
- c- stapedius muscle
- d- all of the above.

#### 15- Neuropraxia means

- a- Degeneration of the nerve axons but the nerve sheath remains intact.
- b- Degeneration of the nerve axons and the nerve sheath
- c- Functional conduction nerve block.
- d- Non of the above.

#### 14- A preauricular swelling of 2 months duration and progressive course of facial paralysis is

- a- Mumps
- b- Malignant parotid tumour
- c- Bell's palsy
- d- Temporomandibular joint arthritis

#### 6- Tumours

#### 1-The earliest manifestation of glomus tympanicum is

- a- conductive deafness
- b- pulsating tinnitus
- c- bleeding from the ear
- d- a bleeding polyp in the external auditory canal.
- e- all of the above

### 2- In a 45 years old female patient presenting with pulsating tinnitus and red mass behind the drum, all of the following are true except

- a- glomus tumour is a possible diagnosis.
- b- more assessment is needed by CT scan or MRI.
- c- MRI angiography confirm the diagnosis.
- d- biopsy is essential to verify the pathological nature

### 3- A patient with a history of right discharging ear for more than 10 years presented with right deep seated earache, offensive otorrhea and fleshy mass in the external canal. You must suspect

- a- glomus tympanicum tumour.
- b- Malignant otitis externa.
- c- Squamous cell carcinoma.
- d- Tubotympanic chronic suppurative otitis media with an aural polyp.

#### 4- Rodent ulcer of the auricle

- a- has everted edge
- b- commonly spreads to pre and post-auricular lymph nodes
- c- is the commonest malignant tumor of the auricle.
- d- All of the above.

#### 5- The earliest manifestation in glomus tympanicum is

- a- Bloody otorrhea
- b- Pulsating tinnitus
- c- Conductive deafness
- d- Facial nerve paralysis.

#### 6- The best investigation for diagnosis of vestibular schwannoma is

- a- CT scan.
- b- MRI

- c- ABR
- d- Pure tone audiogram

## 7- In a 50 years old patient presenting with right hearing loss and tinnitus of one month duration. His pure tone audiogram showed right sensorineural hearing loss. Which of the following is not true:

- a- Presbyacusis is suspected
- b- Nothing is done and annual follow up is only needed.
- c- Acoustic neuroma is suspected.
- d- MRI is the best investigation to uncover the diagnosis.
- e- a and b
- f- c and d

#### **7- EAR PROCEDURES**

#### 1- It is better to avoid ear wash in

- a- wax impaction in the external auditory canal.
- b- animate foreign body in the external auditory canal.
- c- disc battery.
- d- impacted vegetable foreign body
- e- both b and c.
- f- both c and d.

#### 2- In management of auricular hematoma

- a- Aspiration of blood is only needed
- b- Systemic antibiotic is sufficient
- c- Evacuation of blood followed by pressure bandage is the proper management
- d- No treatment is needed because it will resolve spontaneously.

#### 3- Which of the following statements is false concerning Cochlear implant

- a- postlingually deaf get far better benefit than prelingually deaf
- b- it is indicated in total sensory hearing loss
- c- the auditory nerve should be intact
- d- after the operation speech discrimination is good and lip reading is not needed

#### 4- Which of the following statements is wrong concerning myringotomy Operation

a- it is indicated in acute suppurative otitis media with bulging drum

- b- it is indicated in secretory otitis media after failure of medical treatment
- c- it is better done in the postero superior quadrant of the tympanic membrane
- d- Residual perforation of the tympanic membrane is one of its complications

#### 5- Before tympanoplasty in a 30 years old patient, the following is required

- a- Audiogram
- b- ensure dry perforation
- c- treatment of any underlying nasal or paranasal sinus infection
- d- all of the above
- e- non of the above

#### 6- By modified radical mastoidectomy we mean

- a- removal of mastoid air cells and all middle ear contents
- b- removal of diseased mastoid air cells
- c- removal of mastoid air cells and all middle ear contents with preservation of healthy remnants of tympanic membrane and ossicles
- d- non of the above.

#### 7-The aim of radical mastoidectomy is:

- **a-** To give safe ear.
- **b-** To preserve hearing.
- **c-** Reconstruct the ossicles.
- **d-** Reconstruct the tympanic membrane.

#### 8- By radical mastoidectomy operation we mean

- a- removal of mastoid air cells and all middle ear contents except stapes
- b- removal of diseased mastoid air cells
- **C-** removal of mastoid air cells and all middle ear contents with preservation of healthy remnants of tympanic membrane and ossicles .
- d- non of the above

#### 9- The most common complication of myringotomy operation is

- a- injury of facial nerve.
- b- dislocation of the incus
- C- injury of the jagular bulb
- **d** residual perforation

### 10- In myringotomy operation the posterosuperior quadrant of the tympanic membrane must be avoided

- a- to avoid injury of dehiscent jagular bulb.
- b- to avoid injury of the ossicles.
- **C-** non of the above

#### d- both 1 & 2

### 11- The first line of treatment in a child who develops lower motor neurone facial paralysis after acute otitis media is

- a- antibiotics and corticosteroids.
- b- decompression of facial nerve.
- c- exploration of facial nerve
- d- myringotomy

#### 12- Cochlear implant is indicated in patients having

- a- Bilateral conductive hearing loss
- b- Bilateral sensori-neural hearing loss
- c- Bilateral total hearing loss who can not gain benefit from hearing aids.
- d- all of the above.

#### 13- It is better to avoid ear wash in

- **a-** cases of tympanic membrane perforatation
- **b-** disc battery in the external canal
- **c-** impacted vegetable foreign body in the external canal.
- **d-** otitis externa
- **e-** all of the above
- **f** both b and c.

#### 14- Myringotomy may be indicated in:

- a- Secretory otitis media
- b- Acute otitis media with bulging drum
- c- Otitic barotrauma

All of the above

#### 8- SYMPTOMATOLOGY

#### 1- The pain in acute suppurative otitis media in the suppurative stage is:

- a- Dull aching.
- b- Throbbing.
- c- Boring.
- d- Burning.

#### 2- The commonest cause of vertigo is

- a- meniere's disease
- b- Labyrinthitis.
- C- benign paroxysmal positional vertigo.

- d- Vestibular neuronitis
- e- ototoxicity

#### 3- Which of the following is characterized by vertigo without hearing loss:

- a- Benign paroxysmal positional vertigo.
- b- Vestibular neuronitis
- c- Meniere's disease
- d- All of the above
- e- a and b are true
- f- b and c are true

#### 4- Which of the following is associated with objective tinnitus

- a- Menière's disease.
- b- Ear wax impaction.
- c- Acoustic neuroma.
- d- Palatal myoclonus.
- e- Middle ear effusion

#### 5 - The commonest cause of unilateral sensori-neural hearing loss is

- a- Ototoxic poisoning.
- b- Measles
- c- Mumps.
- d- Rh incompatibility
- e- Syphilis.

#### 6- Fluctuant SNHL usually occurs in:

- a- Presbyacusis.
- b- Meniere's disease.
- c- Otosclerosis.
- d-All of the above.

### 7- In a patient suffering from sudden severe vertigo lasting for 2 days which resolves spontaneously, but hearing is normal, the diagnosis is likely

- a- Meniere's disease
- b- Vestibular neuronitis
- c- Labyrinthitis
- d- Vestibular schwannoma

#### 8-The commonest cause of vertigo is

- a- Meniere's disease
- b- Labyrinthitis

- c- benign paroxysmal positional vertigo
- d- ototoxicity.

#### 9-The commonest cause of conductive deafness in adults is:

- a- wax
- b- secretory otitis media
- c- otomycosis
- d- otosclerosis.

#### 10- The commonest cause of conductive deafness in children is:

- a- wax
- b- secretory otitis media
- c- otomycosis
- d- otosclerosis.

#### 11-Mixed hearing loss may be caused by one of the following:

- a- Otosclerosis.
- **b-** Meniere's disease.
- **c-** Ear wax.
- d- Acoustic neuroma.

#### 12- In a patient suffering from purulent otorrhoea and attic perforation

- a- treatment is essentially surgical
- b- medical treatment and follow up is sufficient
- c- myringoplasty is the only needed treatment
- d- none of the above.

#### 13- Etiology for pulsatile tinnitus includes the followings except:

- a- Arteriovenous malformation of neck.
- b- Otosclerosis.
- c- Glomus jugulare tumors.
- d- Hyperthyroidism.

#### 14-The pain in acute suppurative otitis media is more severe at:

- a- Night.
- **b-** Morning.
- **c-** Mid-day.

**d-** All the day.

#### 15- All the following are causes of pulsating otorrhea except

- a- Acute suppurative otitis media
- b- Cholesteatoma
- c- Acute excacerbation of chronic suppurative otitis media
- d- Chronic otitis media complicated by extradural abscess.

#### MISCILLANEOUS

#### 1-Meniere's disease:

- **a-** is commonly bilateral.
- **b-** Is the commonest cause of vertigo.
- **c-** The type of deafness is conductive.
- **d-** A Decompression of the labyrinth is indicated if the vertiginous attack is crippling.

### 2-Slowly progressive conductive deafness in middle aged female with normal drum & Eustachian tube function is most probably due to:

- a-Otitis media with effusion.
- **b-** Otosclerosis.
- c- Malingering.
- d-Tympanosclerosis.

#### 3- In Paracusis Welesii

- a- The patient hears better in quiet places.
- b- The patient hears better in noisy places.
- c- The patient has sensori-neural hearing loss.
- d- The patient can not tolerate loud sound.

#### 4-The IX, X and XI cranial nerves may be involved in all of the following except

- a- acoustic neuroma
- b- transverse temporal bone fracture.
- c- malignant otitis externa
- d- squamous cell carcinoma of the middle ear.

#### 5-The following have an ototoxic effect except

- a- gentamycin
- b- frusemide
- c- Streptomycin
- d- amoxicilline
- e- quinine.

#### 6- All are correct about Meniere's disease except:

- a- It is an endolymphatic hydrops.
- b- Males are more affected than females.
- c- The type of deafness is conductive.
- d- Decompression of the labyrinth is indicated if the vertiginous attack is crippling.

#### 7- Referred otalgia from pyriform sinus cancer is through:

- a- IX cranial nerve
- b- X cranial nerve
- c- XII cranial nerve
- d- VII cranial nerve

### 8- Complete the following sentences by one of the following words ( normal, subnormal, low grade, high:

- a- In complicated otitis media: Temperature is ..... in mastoiditis.
- b- Temperature is...... In petrositis

because.....

- c- Temperature is ......in extradural abscess.
- d- Temperature is ...... in meningitis.
- e- Temperature is ......in labyrinthitis.

#### 9- Which of the following drugs are known to cause tinnitus?

- a- Salicylates.
- b-Loop Diuretics.
- c-Aminoglycosides.
- d-NSAID.
- e-All of the above

#### TRUE OR FALSE

- 1- The external auditory canal is embryologically derived from the first branchial cleft
- 2- The auricle develops from the first and second branchial clets
- 3- The normal tympanic membrane is red in colour.
- 4- The pinna is well formed at 20 week of intrauterine life.
- 5- Ear washing is not contraindicated in traumatic perforation of the drum.
- 6- Pathological perforation of the drum occurs at any site while traumatic ones occurs in pars tensa only.
- 7- In ear washing, the sterile nozzle of the syringe is directed to the drum directly.
- 8- Ear washing is indicated in the presence of fistula between the middle & inner ear.
- 9- Hearing is more affected in anterior drum perforation than in posterior drum perforation.
- 10- A 10 years old girl presented to the outpatient clinic with right earache of 12 hours duration. She had sneezing, rhinorrhea and headache for the last 2 days. No tenderness on pressure on the tragua. Diagnosis is likely acute otitis externa.

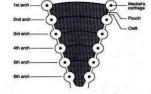
- 11- The internal auditory canal is all bony but the external auditory canal is cartilaginous at its outer third and bony at its medial two thirds.
- 12- The combination of areal ratio (between the tympanic membrane and footplate of stapes) and the lever action of the ossicles creates a 22:1 mechanical advantage, which provides a 25-dB increase in sound energy arriving to the cochlea.
- **13-** A 35 years old female patient presented with right tinnitus 1 year ago followed by slowly progressive right hearing loss after 6 months. Otoscopic examination was completely normal. Pure tone audiometry reveals right high frequency sensorineural hearing loss. Speech discrimination test and auditory brain stem response (ABR) showed abnormal findings. The most valuable investigation to detect an early lesion would be MRI of the brain and IAC:
- 14- A 35 y ears old female patient presented with right tinnitus 1 year ago followed by slowly progressive right hearing loss after 6 months. Otoscopic examination was completely normal. Pure tone audiometry reveals right high frequency sensorineural hearing loss. Speech discrimination test and auditory brain stem response (ABR) showed abnormal findings. The most probable diagnosis is Vestibular Schwannoma.
- 15- Ossicular discontinuity should be considered with losses > 50 dB.
- 16- The initial work-up for unilateral sensori-neural hearing loss should include studies to rule out the possibility of an acoustic neuroma in the internal auditory canal. Either an auditory evoked brainstem response test or, in cases of high suspicion, gadolinium-enhanced magnetic resonance imaging of the internal auditory canal is performed.
- 17- Furunculosis occurs in the inner bony external auditory canal because its skin contains hair follicles.
- 18- In stepping test for a patient having vestibular dysfunction, the patient deviates less than 45 degree to the right or to left.
- 19- Tympanometry measures the middle ear pressure and the mobility of the tympanic membrane and ossicles.
- 20- When an elderly diabetic patient presents with persistent otitis externa inspite of proper medical treatment, malignant otitis externa should be suspected.
- 21- A patient who does not hear low intensity sound but can nit tolerate high intensity sound is having what is called "recruitment".

#### Answers

#### 1- ANATOMY AND PHYSIOLOGY

1, d - 2 - a - 3 d - 4 a - 5 c - 6 c - 7 d - 8 a - 9 a - 10 c - 11 f - 12 d - 13 c - 14 c - 15 d - 16 b - 17 a - 18 c. The organ of Corti is the sensory end organ of hearing in the cochlea. The macula is the sensory end organ in the utricle and saccule. 19 c - 20 b - 21 a - 22 a - 23 b - 24 a

#### DEUELOPMENT OF THE EAR



During the third week of fetal development, 6 visceral arches, clefts and pouches appear on the lateral aspect of the head **First visceral cleft (ectoderm): gives:** 

- Auricle (6 tubercles).
- External auditory canal.
- Outer layer of tympanic membrane.

#### First visceral arch (mesoderm): gives:

- Malleus.
- Incus.
- Fibrous layer of tympanic membrane.

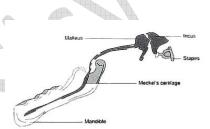
**First and second pharyngeal pouches (entodern);** give Eustachian tube, Tympanic cavity., Mastoid antrum and Inner layer of tympanic membrane.

#### Second visceral arch (mesoderm): gives

- Head, neck and crura of stapes.

Otic capsule (ectoderm): gives:

- Footplate of stapes and Inner ear.



#### 2- EAR EXAMINATION ANSWERS

1 b - 2 c - 3 d - 4 d - 5 b - 6 b(In a normally hearing person, the air conduction is better than bone conduction. This is called Rinne's positive.) 7 d (The Rinne's test of the left ear is negative in left conductive deafness i.e bone conduction is better than air conduction. In a patient having severe sensori-neural hearing loss in left ear, the sound of the tuning fork placed on the left mastoid may be heard in the other side i.e right ear. This called false negative Rinne's test. In bilateral conductive deafness Rinn's test is negative in both sides.) 8 b - 9 b - 10 d (In a, b and c the type of hearing loss is conductive, so Rinne's test is negative i.e bone conduction is better than air conduction while in Meniere's disease, the hearing loss is sensori-neural so Rinne's test is positive i.e Air conduction is better than bone conduction. 11 c - 12 d - 13 d - 14 b - 15 b - 16 c (In Type C tympanogram there is normal compliance but the peak of the tympanogram is at the negative side so it is consistent with ET dysfunction in which there is negative pressure in the middle ear - 17 b - 18 b - 19 c. 20 a (fever is intermittent i.e occurs in attacks simulating malaria and occurs at irregular intervals between which the patient is relatively well). 21 c - 22 f (In normally hearing person, the activity of the cochlear hair cells produce low intensity sound waves which are called cochlear emission. They can be detected in the external auditory canal - otoacoustic emission)...23 d - 24 d. 25 d. 26 a - 27 c.

#### 3-INFLAMMATORY CONDITIONS

1 c - 2 b - 3 d - 4 c - 5 c - 6 a - 7 d In **stapedial otosclerosis** hearing loss is conductive. In **cochlear type** the hearing loss is sensorineural. In **combined otosclerosis** the hearing loss is mixed. 8 b- 9 c In benign paroxysmal positional vertigo there is recurrent attacks of vertigo for seconds which occurs when the patient assumes certain head position. in **vestibular neuronitis** there is sudden severe vertigo for dayes but be hearing loss in **Meniere's disease** recurrent attacks of vertigo, hearing loss and tinnitus associated with nausea and vomiting and the patient is

free between attacks. In **Acoustic neuroma** there is unilateral persistent tinnitus and gradually progressive hearing loss but vertigo is uncommon- 10 d- 11 c- 12 b- 13 c- 14 b- 15 a- 16 c. In **mastoiditis** there is profuse mucopurulent or purulent otorrhoea which recurs rapidly after removal (a diagnostic sign called **reservoir sign**). 17 b- 18 a- 19 a (The presence of foul odour otorrhoea and attic perforation is diagnostic of cholesteatoma. Treatment of this case is essentially surgical by mastoidectomy operation (radical or modified radical).) - 20 b- 21 b- 22b- 23 c- 24 c- 25 b (**Sagging** means bulging downwards of the posterosuperior part of the bony external canal and is due to periostitis of the bone overlying the mastoid antrum. It is an early and diagnostic sign of mastoiditis) - 26 c - 27 d - 28 d- 29 c- 30 b- 31 d- 32 d- 33 c. (**Schwartz sign** is a flamingo red tinge of the tympanic membrane due to increased vascularity of the promontory and indicates active otosclerosis) 34 b- 35 f

#### 4-TRAUMATIC CONDITIONS

1 a - 2 b- 3 d- 4 c- 5 d- 6 d- 7 c-

#### **5-FACIAL NERVE**

1 b - 2 d - 3 a - 4 c - 5 d - 6 c - 7 e - 8 c - 9 c - 10 - 11

#### 6- NEOPLASTIC CONDITIONS

 $1 \ b-2 \ d$  (Biopsy is contraindicated as it will lead to profuse bleeding)  $-3 \ c-4 \ c-5 \ b-6$  ab (because it can detect small tumors),  $7 \ e-$ 

#### 7- EAR PROCEDURES

1 f (it is better to avoid ear wash in disc battery to avoid leak of strong alkalies and skin necrosis. Impacted vegetable foreign body will also swell with water. So it is better to extract disc battery and impacted vegetable foreign body with instruments.), 2 c- 3 d- 4 c- ( In myringotomy operation avoid the postero-superior quadrant of the tympanic membrane for fear of destroying the ossicles). 5 d - 6 c - 7 a - 8 a - 9 d - 10 b - 11 d-12c.

#### 8- SYMPTOMATOLOGY

1 b - 2 c - 3 e - 4 d - 5 c - 6 b - 7 b - 8 c - 9 a - 10 b - 11 a - 12 a - 13 b - 14 a - 15-b

#### 9- MISCILLANEOUS

1 d - 2 b - 3 b - 4 b - 5 d - 6 c - 7 b- Temperature is high in mastoiditis. Temperature I high. In petrositis because it is usually accompanied by mastoiditis. Temperature is low grade in extradural abscess. Temperature is persistent & high in meningitis. Temperature is normal in labyrinthitis.

#### 10-FALSE AND TRUE

1 True - 2 true - 3 false - 4 true - 5 false - 6 true - 7 false - 8 false - 9 false - 10 false - 11 true - 12 true - 13 true - 14 true - 15 true - 16 true - 17 false - 18 false - 19 true - 21 true





#### 1- ANATOMY

#### 1- Which of the following sinuses is related to the orbit

- **a-** maxillary sinus
- b- ethmoid sinuses
- **C-** frontal sinus
- d- sphenoid sinus
- e- all of the above.

#### 2-The ethmoid sinuses drain into

- **a-** the middle meatus.
- **b-** the superior meatus.
- c- the spheno-ethmoidal recess.
- d- b and c are true.
- e- a and b are true

#### 3- All of the following arteries share in Keisselbach's plexus except:

- a- anterior ethmoidal artery.
- b- posterior ethmoidal artery.
- C- greater palatine artery.
- d- superior labial artery.
- e- sphenopalatine artery.

#### 4- The following Paranasal sinuses drain into the Ostiomeatal complex except

- a- Posterior ethmoid sinuses.
- b- Frontal sinus.
- c- Maxillary sinus.
- d- Anterior ethmoid sinuses.

#### 5- The external carotid artery gives blood supply to the nose through the following branches except

- a- sphenopalatine artery
- b- greater palatine artery
- c- superior labial artery

d- anterior ethmoidal artery.

#### 6- Anterior ethmoid presents bulge in the middle meatus called:

- a- Bulla ethmoidalis.
- b- Concha bullosa.
- c- Lamina papyracea.
- d- Haitaus semilunaris.

#### 7- The key area in the middle meatus for drainage of anterior group of paranasal sinuses is

- a- The ostiomeatal complex.
- b- The osteomeatal complex.
- c- The sphenoethmoidal recess.
- d- The superior meatus.

#### 8- The nasolacrimal duct opens into

- a- superior meatus.
- b- Middle meatus.
- c- Inferior meatus.
- d- Spheno-ethmoidal recess.

#### 9- The teeth related to the floor of the maxillary sinus are

- a- 1<sup>st</sup> premolar and 2<sup>nd</sup> premolar.
- b- 2<sup>nd</sup> premolar and 1<sup>st</sup> and 2<sup>nd</sup> molar.
- c- 2<sup>nd</sup> and 3<sup>rd</sup> molar.
- d- Canine and premolar.

#### 10- The sphenoid sinus drains into

- a- The middle meatus.
- b- The inferior meatus.
- c- The superior meatus.
- d- The spheno-ethmoidal recess.

#### 11- The parasympathetic nerve supply to the nose

- a- Causes vasodilatation of the blood vessels.
- b- Leads to increased nasal patency
- c- Decrease the glandular secretion.
- d- Is through the deep petrosal nerve.

#### 12-Olfactory cells are situated in

- a- Middle third of the nasal cavity.
- b- Upper third of the nasal cavity.
- c- Lower third of the nasal cavity.
- d- Anterior cranial fossa.

#### 13- Before an odorant molecule can be perceived, it must first

- a- contact the mucosa of the lower middle turbinate.
- b- dissolve in the mucus overlying the olfactory receptors.
- c- flow into the frontal sinus.
- d- flow into the sphenoid sinus

#### 2-History & Examination

#### 1- Some diseases affect special age groups

- a- Nasopharyngeal angiofibroma affects children.
- b- Antrochoanal polyp is mostly seen in old patients
- c- Inverted papilloma is most commonly above forty
- d- Squamous cell carcinoma affects commonly young adults

#### 2- The visible structures by anterior rhinoscopy are the following except

- a- Anterior part of the nasal septum.
- b- Anterior part of the lateral nasal wall.
- c- Cribriform plate of the ethmoid.
- d- Anterior part of the nasal floor.

#### 3- Some diseases affects only males

- a- Inverted papilloma
- b- Nasopharyngeal angiofibroma.
- c- Plummer Vinson syndrome
- d- Postcricoid carcinoma.

#### 4- The best investigation done for a patient suspected to have chronic sinusitis is

- a- Coronal computerized tomography of the nose and sinuses
- b- Occiptomental x aray
- c- Magnetic resonance imaging.
- d- Non of the above.

#### 5- Biopsy is indicated in

- a- Rhinoscleroma
- b- Nasopharyngeal angiofibroma
- c- Unilateral nasal polyp in a child.
- d- All

#### 6- For nasopharyngeal examination

- a- Anterior rhinoscopy is sufficient
- b- Posterior rhinoscopy is an easy and sufficient method.
- c- Endoscopic examination is the best method
- d- Radiologic evaluation is superior to the above methods.

#### **3-CONGENITAL**

#### 1-Initially, bilateral choanal atresia is treated with

- **a-** immediate emergency surgery
- b- McGovern nipple.
- **C-** Nasal catheters
- d- Placing the infant on his or her abdomen.

#### 2-Congenital choanal atresia is

- a- Commonly unilateral
- b- Commonly bony
- c- A neonatal emergency, if bilateral
- d- All are true.

#### 3-An infant with bilateral choanal atresia presents with

- a- Secretory otitis media
- b- Respiratory distress.
- c- Epistaxis
- d- Stridor.

### 4-This bluish pulsitile, compressible mass which increase with straining is most probably

- a- Glioma
- b- Encephalocele
- c- Dermoid
- d- Lipoma.



#### 5- Initially, bilateral choanal atresia is treated with

- a- Immediate emergency surgery
- b- Mc govern nipple
- c- Nasal catheters
- d- Placing the child on his or her abdomen
- e- Observation

#### 4-TRAUMATIC

#### 1-A four years old child presented with left offensive nasal discharge. You should suspect

- **a-** choanal atresia.
- **b-** Adenoid.
- **c-** foreign body impaction.
- **d-** Rhinosinusitis.

#### 2- In a patient presenting to the emergency room with fractured nose associated with edema

- a- postpone reduction for one week.
- b- immediate reduction of the nasal fracture is needed.
- c- patient should be prepared for immediate septorhinoplasty.
- d- postpone for one month before reduction

### 3- The triangular Fracture of the middle third of the face that runs through the maxillary sinus, orbit, external nose and nasal septum is

- **a-** Le Forte 1 fracture.
- **b-** Le Forte 2 fracture.
- **c-** Le Forte 3 fracture.
- **d-** none of the above.

#### 4-Oroantral fistula may follow all of the following except

- **a-** Extraction of 2<sup>nd</sup> premolar tooth.
- **b-** Radical antrostomy operation..
- **c-** Advanced maxillary carcinoma.
- **d-** Inferior meatal antrostomy.

#### 5-Which of the following nasal foreign bodies irritating and cause inflammatory reaction

- a- bean
- b- **button.**
- c- Bead
- d- a piece of plastic

## 6- Fracture of the middle third of the face that runs transversly through the floor of the maxillary sinus and nasal cavity is known as

- a- Le Forte 1 fracture..
- b- Le Forte 2 fracture.
- **C-** Forte 3 fracture.
- d- non of the above.

#### 7-Of the nasal foreign bodies one of the following may cause nasal septal perforation

- **a-** metallic foreign body
- **b-** vegetable foreign body
- **c-** calculator battery.
- **d-** rhinolith

#### **5-INFLAMMATORY**

#### 1-in a patient presenting with severe throbbing pain in the nasal vestibule

- a- the likely diagnosis is vestibulitis.
- b- squeezing pus from the swelling is recommended.
- C- the causative organism is streptococcus hemolyticus.
- d- checking the blood sugar in recurrent cases is recommended

#### 2-The causative organism in influenza is

- a- Haemophilus influenza
- b- influenza virus type A, B, C
- **C-** Rhinovirus
- d- none of the above.

#### 3-The most frequent cause of nasal allergy is

- a- synthetic materials
- b- smoke
- c- insecticides
- d- house dust mites.

#### 4-The primary treatment of acute maxillary sinusitis is

- **a-** Puncture and lavage of the sinus.
- **b-** Inferior meatal antrostomy
- **c-** Medical treatment.
- **d-** Functional endoscopic sinus surgery.

#### 5- The following statements are correct concerning lupus vulgaris except

- a- It is caused by attenuated tubercle bacilli.
- b- reddish ulcerating nodules at the mucocutaneous junction are seen.
- c- perforation of the hard palate is characteristic sign.
- d- perforation of cartilagenous part of the septum may occur.
- e- tuberculin test is positive

#### 6-One of the following statements is not correct concerning rhinosclerma

- a- It is the commonest specific infective granuloma in Egypt.
- b- The disease is endemic in Kalyobeyah.
- c- Biopsy is needed to confirm diagnosis.
- d- The causative organism is klebsiella ozynae.

#### 7-On histopathological examination, the most diagnostic cells of rhinoscleroma are

- a- monocytes
- b- Russel's bodies
- c- Miculicz cells
- d- Lymphocytes

#### 8- Rhinoscleroma of the larynx mostly affects:

- a- Posterior part of the larynx
- b- Supraglottis
- c- Anterior part of the larynx
- d- Subglottis.

#### 9-All the following lines of treatment could be applied in rhinoscleroma EXCEPT:

- a- Rifampicin.
- b- Cytotoxic drugs...
- c- Surgery to canalize the stenosed canal. .
- d- Laser surgery.

#### 10-Apple-jelly nodules of the nasal mucosa is a clinical finding in:

- a- Saroidosis.
- b- Rhinoscleroma.
- c- Lupus vulgaris.
- d- Tuberculosis.

#### 11-The organism involved in the pathogenesis of atrophic rhinitis is

- a- klebsiella rhinoscleromatis.
- b- klebsiella ozynae.
- C- non of the above.
- d- all of the above

#### 12-In atrophic rhinitis the following signs are seen except

- a- reddish non ulcerating firm nodules at the muco-cutaneous junction.
- b- roomy nose.
- C- greenish offensive crusts.
- d- pale and atrophic mucosa

#### 13- Tuberculosis affects which part of the nasal septum

- a- both cartilaginous and bony
- b- cartilaginous
- c- never affects the septum
- d- bony portion

### 14-In a teenager presented with unilateral nasal obstruction with single pale grayish glistening soft pedunculated mass. The most likely diagnosis is:

- **a-** nasopharyngeal angiofibroma.
- **b-** inverted papilloma.
- **c-** antrochoanal polyp.
- **d-** non of the above.

#### 15-Syphilis of the nose may cause

- a- bony septal perforation.
- b- palatal perforation.
- c- saddle nose deformity.
- d- all of the above.

#### 16-The criteria of early congenital syphilis are

- a- Persistent rhinorrhoea, vestibulitis with fissuring of the upper lip.
- b- Notching of the upper central incisors with keratitis.
- c- Peforation of the nasal septum.
- d- Non of the above.

## 17-Uncontrolled diabetic patient was diagnosed as having acute sinusitis. His general condition deteriorated rapidly. Nasal examination revealed blackish crusts, the most likely diagnosis is

- a- mycetoma.
- b- acute fulminating fungal sinusitis.
- c- allergic fungal sinusitis.
- d- chronic indolent fungal sinusitis

### 18-A patient presented with bilateral nasal obstruction after nasal trauma. The patient temperature is 38. There is throbbing nasal pain. Your diagnosis is

- a- nasal frunculosis.
- b- septal hematoma.
- **C-** septal abscess.
- d- 4- non of the above

## 19-A 25 years old patient with fever, mucopurulent nasal discharge and pain over the cheeks is suffering from

- a- Frontal sinusitis.
- b- Acute maxillary sinusitis.
- c- Ethmoidal sinusitis.
- d- Chronic maxillary sinusitis

20-An atopic 35 years old patient presented with unilateral nasal obstruction. Examination revealed unilateral multiple nasal polypi and CT scan revealed unilateral sinus opacity with hyperdense spots . what is your diagnosis?

- a- allergic nasal polypi
- b- acute fulminating fungal sinusitis.
- c- allergic fungal sinusitis
- d- chronic indolent fungal sinusitis.

#### 6-TUMORS

1-40 years old male presented with left nasal obstruction and fleshy reddish nasal mass. There is a history of recurrence after previous surgery 2 years ago

- a- the likely diagnosis is nasopharyngeal angiofibroma
- b- inverted papilloma is suspected.
- c- allergic nasal polypi is a possible diagnosis
- d- none of the above.

#### 2-Juvenile nasopharyngeal angiofibroma is characterized by the following except:

- a- Affects teenagers
- b- Causes nasal obstructions
- c- Very vascular tumor
- d- Affects only females

#### 3-The commonest benign tumor of the paranasal sinuses is

- a- inverted papilloma
- b-osteoma
- c-nasopharyngeal angiofibroma
- d- non of the above

#### 4-All of the following are tumors of the nose except

- a- Inverted papilloma.
- b- Bleeding polyp of the septum.
- c- Pott's puffy tumour.
- d- Osteoma.

### 5- In a 45 years old female patient presenting with pulsating tinnitus and red mass behind the drum, all of the following are true except:

- a- glomus tumour is a possible diagnosis
- b-more assessment is needed by CT scan or MRI
- c- MRI angiography confirm the diagnosis
- d-biopsy is essential to verify the pathological nature

#### 7- SYMPTOMATOLOGY

#### 1-Cacosmia means

- a- Complete loss of smell
- b- Diminution of the sense of smell
- c- Smelling bad odor due to the presence of noxious substance in the nose.
- d- Smelling of non existing odor.

#### 2-Parosmia means

- a- smelling of bad odor due to the presence of noxious substance in the patient nose.
- b- smelling of non existing odor.
- c- complete loss of the sense of smell.
- d- -diminution of the sense of smell

#### 3-Cerebrospinal rhinorrhea is characterized by all of the following except

- a- watery and salty.
- b- does not stiffen handkerchief.
- **c** increase on straining.
- d- Bilateral.

#### 4-The following are causes of unilateral offensive nasal discharge except

- a- nasal malignancy.
- b- nasal foreign body.
- c- nasal allergy.
- d- allergic fungal sinusitis

# 5-A 3 years old male child with recurrent epistaxis, subcutaneous hematoma and swollen joints after minor trauma is probably suffering from

- a- thrombocytopenic purpura.
- b- hemophilia.
- c- Leukemia.
- d- rheumatic fever

#### 6-In headache from sinusitis, all of the following are true except

- a- it is usually due to acute infection.
- b- It is worse in late afternoon and evening.
- c- It is aggravated by stooping..
- d- It is not well localized in chronic sinusitis.
- e- It is occipital in sphenoiditis.

#### 7-All of the following are characteristic of rhinolalia clausa except

- a- it is caused by bilateral nasal obstruction
- b- there is decreased nasal resonance.
- c- it affects the letters m& n.
- d- it is a manifestation of cleft palate.

#### 8- Keisselbach's plexus accounts for the following percentage of epistaxis

- a- 50%.
- b- 60%.
- c- 70%.
- d- 80%.
- e- 90%

#### 9-Bilateral nasal obstruction in a 40 years old patient can be caused by

- a- posterior choanal atresia.
- b- bilateral nasal polypi.
- c- nasopharyngeal angiofibroma..
- d- foreign body.

## 10-In a patient presenting with right watery clear nasal discharge that increases with straining, the following statements are correct except.

- a- cerebrospinal rhinorrhoea is suspected.
- b- CT scan with intrathecal dye injection is necessary.
- **C** biochemical analysis of the nasal discharge should be done.
- d- nasal drops and packing are helpful to the patient.
- e- patient should avoid nose blowing and leaning

# 11-A 19 years old female presented with anosmia and crusty nose. Her mother described bad odor of her daughter's nose. The most likely diagnosis is

- a- rhinoscleroma
- b- foreign body in the nose
- c- chronic sinusitis.
- **d-** atrophic rhinitis

#### 12-A patient with epistaxis showing a bleeding point in little's area is best managed by:

- **a-** Cautery
- b- Anterior nasal pack
- **C-** Posterior nasal pack
- d- Coagulants.

# 13-In a teenager male with recurrent severe left epistaxis , pallor and conductive deafness of the left ear, you should suspect

- a- antrochoanal polyp.
- b- inverted papilloma.
- C- nasopharyngeal angiofibroma.
- d- septal hemangioma

#### 8-MISCILLANEOUS

### 1-The incidence of septal perforation is less common in septoplasty than in submucous resection of the nasal septum because

- a- The incidence of septal hematoma is less common in septoplasty.
- b- Dissection of the septum is made on one side .
- c- The septal cartilage is remodeled and left in place.
- d- both a and b are true.
- e- Both b and c are true.

#### 2-The commonest cause of septal perforation is

- a- septal abscess
- b- lupus vulgaris
- c- septal operations
- d- habitual nose picking

#### 3-All of the following comprise Hatchinson's triade except

- a- notching of the upper central incisor,
- b- interstitial keratitis
- c- septal perforation.
- d- sensorineural hearing loss

#### 4-All of the following statements are correct concerning septal perforation except

- a- it is commonly asymptomatic
- b- epistaxis may occur on separation of crusts
- c- the commonest cause is habitual nose picking
- d- surgical closure is not successful in most cases

#### 5-The most common site of origin of allergic nasal polypi is:

- a- Maxillary sinus.
- b- Ethmoidal sinus.
- c- Frontal sinus.

d- Sphenoid sinus.

#### 6- To define the offending allergen in allergic rhinitis the following is done

- a- microscopic examination of a nasal smear
- b- skin sensitivity test.
- c- blood examination for IgE level.
- d- all of the above.
- e- non of the above

#### 7-A septal abscess must be drained immediately for fear of

- a- frontal lobe abscess.
- b- cavernous sinus thrombophlebitis.
- **C-** nasal deformity
- d- orbital cellulitis

#### 8- A rhinolith is caused by

- a- neglected foreign body in the nose.
- b- precipitation of calcium salts on a blood clot or inspissated mucus
- **C-** all of the above.
- d- non of the above.

#### 9-Perforation of bony part of the nasal septum occurs in:

- a- Sarcoidosis...
- b- Rhinoscleroma.,
- c- Tuberculosis...
- d- Syphilis.

#### 10-The mechanism of nasal allergy is:

- a- Type 1 hypersensitivity reaction.
- b- Type 2 hypersensitivity reaction.
- c- Type 3 hypersensitivity reaction.
- d- Type 4 hypersensitivity reaction.

#### 11-Eosinophils in great numbers in nasal secretion is a finding in:

- a- Atrophic rhinitis.
- b- Chronic rhinitis.
- c- Allergic rhinitis.
- d- Acute rhinitis.

### 12-Unilateral polypoidal mass arising from the lateral wall of the nose in 55 years old man is most probably:

- a- Inverted papilloma.
- b- Rhinoscleroma.

- c- Allergic nasal polyp.
- d- Antrochoanal polyp.

#### 13-The commonest cause of epistaxis in elderly is

- a- Inflammation
- b- Trauma
- c- Sinusitis
- d- Hypertension.

#### 14-Sneezing is a prominent feature in:

- a- Atrophic rhinitis.
- b- Chronic rhinitis.
- c- Allergic rhinitis.
- d- Acute rhinitis.

#### 15- A septal reddish polyp which bleeds easily on touch is most probably

- a- Capillary hemangioma.
- b- Inverted papilloma.
- c- Juvenile angiofibroma.
- d- dermoid

#### 16-Saddle nose may be due to the following except:

- a- overresection of septal cartilage
- b- Syphilis.
- c- septal abcess.
- d- Rhinosceleroma.

### 17- A patient with a C- shaped deviated nasal septum may suffer from all of the following symptoms except

- a- epistaxis
- b- unilateral nasal obstruction
- c- facial pain.
- d- parosmia

#### 18-The most frequent cause of septal perforation is

- a- Tuberculosis
- b- Leprosy.
- c- Congenital.
- d- Operative.

#### 9- OPERATIVE

Dr Mossad

#### 1-Which of the following is wrong concerning submucous resection septal operation

- a- it is contraindicated before the age of 18.
- b- it can be done under local anaesthesia.
- **C-** the incidence of septal perforation is less than septoplasty operation.
- d- the incidence of septal hematoma is more common than septoplasty operation.

#### 2- Deviated nasal septum can be associated with

- a- unilateral nasal obstruction.
- b- bilateral nasal obstruction.
- c- epistaxis.
- **d** all of the above.

#### 3-Functional Endoscopic sinus surgery is the operation of choice in all of the following except

- a- mucocele of the paranasal sinus.
- b- Twisted nose.
- c- Chronic sinusitis.
- d- Nasal polyposis.

#### 4-The value of functional endoscopic sinus surgery is to

- a- Restore the function of the nose and sinuses
- b- Avoid external scar
- c- Preserve sinus drainage through the natural ostium.
- d- All

#### 5- The commonest cause of nasal septal perforation is

- a- Tuberculosis
- b- Syphilis
- c- Septal operations
- d- Congenital

#### **ANSWER**

#### **ANATOMY**

1a, 2e, 3b, 4 a. 5d, 6a, 7a, 8c, 9b, 10d, 11a, (The **deep petrosal nerve** (**large deep petrosal nerve**) is given off from the <u>carotid plexus</u>, and runs through the <u>carotid canal</u> lateral to the <u>internal carotid artery</u>. It then enters the cartilaginous substance which fills the <u>foramen lacerum</u>, and joins with the <u>greater superficial petrosal nerve</u> to form the <u>nerve of the pterygoid canal</u>, also known as the Vidian nerve. It carries postsynaptic <u>sympathetic</u> nerve fibers to the <u>pterygopalatine ganglion</u>, also known as the sphenopalatine ganglion. These fibers innervate <u>blood vessels</u> and <u>mucous glands</u> of the head and neck). 12b, 13b.

**HISTORY & EXAMINATION** 

1c, 2c, 3b, 4a, 5a, 6c.

CONGENITAL

1b, 2d, 3b, 4b.

**TRAUMATIC** 

Dr Mossad

1c, 2a, 3b, 4d, 5a, 6a, 7c.

**INFLAMMATORY** 

1 d, 2b, 3d, 4c, 5c, 6d, 7c, 8d, 9b, 10c, 11b, 12a, 13b, 14c, 15d, 16a, 17b, 18c, 17b, 20c.

**TUMORS** 

1b, 2d, 3b, 4c.

**SYMPTOMS** 

1c, 2b, 3d, 4c, 5b, 6b, 7d, 8e, 9b, 10d, 11d, 12a, 13c,

MISSOLANEOUS

1e, 2c, 3c, 4c, 5b, 6b, 7b, 8c, 9d, 10a, 11c, 12a, 13d, 14c, 15 a, 16 d, 17d, 18d.

**OPERATIONS** 

1c, 2d, 3b, 4d.



#### 1-ANATOMY & PHYSIOLOGY

#### 1- The nasopharynx takes its sensory nerve supply from

- a- trigeminal nerve
- b- glossopharyngeal nerve
- C- vagus nerve
- **d-** non of the above

#### 2- The oropharynx takes its sensory nerve supply from

- a- trigeminal nerve
- b- glossopharyngeal nerve
- C- vagus nerve
- d- non of the above

#### 3- The hypopharynx takes its sensory nerve supply from

- a- trigeminal nerve
- b- glossopharyngeal nerve
- c- vagus nerve
- d- non of the above.

#### 4- The part of the pharynx that lies in front of the $3^{rd}$ to $6^{th}$ cervical vertebra is

- a- oropharynx
- b- nasopharynx
- c- hypopharynx
- **d-** the whole pharynx.

#### 5- The voluntary stage of swallowing is

- a- the oral phase
- b- the pharyngeal phase
- C- the esophageal phase
- d- both 1 and 2

#### 6- The posterior pillar of the tonsil is formed by

- a- Palatoglossus muscle.
- b- Palatopharyngeus muscle
- c- Tensor palate muscle
- d- Styloglossus muscle.

#### 7- Infreior constrictor musle of the pharynx take origin from

- a- Hyoid bone
- b- Mandible
- c- Maxilla
- d- Thyroid and cricoid cartilage

#### 8- The second stage of swallowing is completed by

- a- Elevation of the soft palate
- b- Retroflexing epiglottis
- c- Closure of the laryngeal aperture
- d- Cricopharyngeal sphincter relaxation

#### **2-INFLAMMATORY**

# 1- A middle aged female with gradually progressive dysphagia, koilonychia, hypochromic anaemia and glazed tongue is suffering from

- a- Plummer Vinson syndrome.
- b- hypopharyngeal carcinoma.
- c- oesophageal carcinoma.
- d- achalasia

#### 2-The most common cause for pharyngeal and oral ulceration is

- a- Behcet disease.
- b- aphthous ulcers.
- c- tuberculous ulcers.
- d- syphilitic ulcer

#### 3-The earliest and commonest complication of diphtheria is

- **a-** heart failure
- **b-** palatal paralysis.
- **c-** laryngeal obstruction.
- **d-** acute nephritis

#### 4-The earliest and Commonest neurological complication of Diphtheria is

- a- paralysis of occular muscles.
- b- paralysis of the diaphragm
- c- palatal paralysis.
- d- laryngeal paralysis

#### 5-Which of the following is not true concerning active immunization against diphtheria

- a- it is compulsory and given at the age of 2,4 and 6 month.
- b- it is given to contacts of diphtheretic patients.
- c- it is given to diphtheria patients.
- d- booster doses are given at the age of 18 months and 5 years

#### 6-In diphtheria, the antitoxic serum is given

- a- To neutralize the circulating antitoxin.
- b- To neutralize the fixed antitoxin
- c- to kill the diphtheria bacilli.
- d- all of the above

#### 7-True pharyngeal membrane occurs in

- a- vincent angina
- b- diphtheria.
- c- infectious mononucleasis.
- d- acute membranous tonsilitis

#### 8-Rapid onset of sore throat, fever, anorrhexia and malaise suggest

- a- allergic rhinitis.
- b- Influenza.
- c- Vasomotor rhinitis.

d- All.

# 9-A patient suffering from severe sore throat and generalized lymphadenopathy received ampicilline injection by his family doctor and then he developed rubella like skin rashes. You should consider doing

- a- Blood picture
- b- Abdominal ultrasound
- c- Monospot test
- d- All of the above are true
- e- Continue giving ampicilline.

# 10-An elderly diabetic patient developed milky white spots on his oral and pharyngeal mucosa. You must suspect

- a- Behcet disease
- b- Aphthous ulcers
- c- Vincent angina
- d- Moniliasis.

# 11-A single painless, firm pinkish ulcerated swelling with punched out edge on the lip is most probably

- a- Tuberculous
- b- Syphilitic
- c- Traumatic
- d- Malignant

#### 12-The diagnostic manifestation of a Parapharyngeal abscess is

- a- Trotter's triad
- b- Geisenger's sign
- c- Gradenigo triade
- d- Boeck's triade.

#### 13-Boeck's triad occurs due to:

- a- Quinsy
- b- Retropharyngeal abscess
- c- Parapharyngeal abscess
- d- Vincent angina.

#### 14-Infection of the floor of the mouth which is usually dentogenic in origin

- a- is called trench mouth
- b- is known as Ludwig's angina

- c- is called Vincent's angina
- d- all are true

#### 15-The site of incision for drainage of parapharyngeal abscess is :

- a- Poaterior to the sternomastoid muscle.
- b- Anterior to the sternomastoid muscles.
- c- Through the crypta magna of the tonsil.
- d- All of the above

#### **3-THE TONSILS**

#### 1-The nerve supply of the tonsils comes from

- a- sphenoplatine nerve
- b- glossopharyngeal nerve
- c- lingual nerve
- d- vagus nerve.

#### 2-Adenoids are removed by

- a- dissection and ligation of bleeders
- b- curettage and temporary packing of the nasopharynx
- c- cryosurgery
- d- laser

#### 3-The most serious complication after tonsillectomy is

- a- Hemorrhage
- b- Respiratory obstruction
- c- Shock
- d- Infection

### 4-In a 3 years old child with having mouth breathing, rhinolalia clausa and Snoring of one year duration, the diagnosis is most likely,

- a- bilateral choanal atresia
- b- Adenoids
- c- acute rhinitis
- d- non of the above.

#### 5-In a 4 years old child presenting with bleeding per mouth 5 days after tonsillectomy

- a- ligation of bleeding points should be carried out immediately.
- b- the cause of bleeding in this patient is slippage of a loose ligature.
- c- if conservative measures fail to stop bleeding consider packing the tonsillar bed with absorbable haemostatic material
- d- All of the above.

### 6-A 4 years old child presented by his mother complaining of lack of attention, mouth breathing and hyponasality

- a- secretory otitis media is suspected
- b- adenoid is suspected
- c- both a and b
- d- non of the above

#### 7- The following are signs of chronic tonsillitis except:

- a- Enlarged cervical lymph nodes
- b- Inequality of the size of the tonsils
- c- Pus in the tonsillar crypts
- d- Edema of the uvula.

#### **4- TRAUMATIC**

#### 1-A four years old child presented with left offensive nasal discharge. You should suspect

- a- choanal atresia
- b- adenoid
- c- foreign body impaction
- d- rhinosinusitis

#### 5- NEOPLASTIC

- 1-Moure's sign can be detected in
  - a- Nasopharyngeal carcinoma
  - b- Oropharyngeal carcinoma
  - c- Postcricoid carcinoma
  - d- Supraglottic carcinoma

# 2-In a patient with progressive dysphagia to solids then also to fluids, you should suspect all of the following except

- a- Postericoid carcinoma
- b- Carcinoma of the pyriform fossa
- c- Esophageal carcinoma
- d- Achalasia of the cardia.

#### 3-Which of the following tumours has the best prognosis

- a- Postcricoid carcinoma
- b- Nasopharyngeal carcinoma
- c- Vocal fold carcinoma
- d- esophageal carcinoma

#### 4-The Fossa of Rosenmullar is the common site for:

- a- Angiofibroma
- b- Lipoma
- c- Adenoid
- d- Nasopharyngeal carcinoma.

#### 5-All of the following are precancerous lesions except

- a- Plummer Vinson syndrome
- b- Leukoplakia
- c- adult solitary papilloma of the larynx
- d- juvenile multiple papillomatosis of the larynx

#### **MISCILLANEOUS**

#### 1-Antrochoanal polyp arises from

- a- middle meatus
- b- ethmoid sinuses
- c- maxillary sinus
- d- sphenoid sinus.

#### 2-One of the following is characteristic of rhinolalia aperta

- a- it is caused by bilateral nasal obstruction
- b- there is decreased nasal resonance
- c- it affects the letters m& n
- d- it is a manifestation of cleft palate
- e- Both C and D are right.

#### 3-All of the following are emergency cases except

- a- Bilateral choanal atresia.
- **b-** Nasal foreign body.
- **c-** Epistaxis.
- **d-** Antrochoanal polyp.

#### 4-Snoring is defined as

- a- difficult noisy breathing due to partial obstruction of the larynx, trachea or bronchi.
- b- noisy breathing during sleep due to vibration of the hypotonic dynamic walls of the pharynx.
- c- both A and B are true.
- d- both A and B are wrong.

#### 5-One of the following is an emergency case

- a- bilateral choanal atresia.
- **b-** rhinoscleroma.
- **c-** Plummer Vinson's syndrome
- d- unilateral choanal atresia.
- e- deviated nasal septum.

### 6--A 30 year old patient with loss of sensation of the base of the tongue, the pharynx and aspiration . this can be associated with a lesion of the

- a- Jagular foramen
- b- Foramen ovale
- c- Carotid canal
- d- Stylomastoid foramen.

#### 7- All of the following are true about cleft palate except

- a- patient has hypernasality
- b- Otitis media may be a complication.
- c- Adenoid can be done safely.
- d- Suckling is difficult.

### 8- A 40 years old female has dysphagia for fluids and can swallow solids relatively well. This suggests

- a- An obstucting tumor
- b- A neurogenic impairment
- c- A Zenker diverticulum
- d- A Stenosis of the esophagus

#### 9- Obstructive sleep apnea is defined as

- a- Cessation of respiration during sleep for more than 20 seconds
- b- Cessation of respiration during sleep for more than 20 seconds and more than 30 attacks per 7 hours sleep
- c- Cessation of respiration during sleep for more than 10 seconds and more than 30 attacks per 7 hours sleep

d- Cessation of respiration during sleep for more than 10 seconds and more than 10 attacks per 7 hours sleep

#### 10-The pharyngeal pouch passes through:

- a- Superior constrictor muscle
- b- Killian dehiscence
- c- Middle constrictor muscle
- d- Hyoid bone

#### 11- A swelling felt in the neck which may gurgle on palpation, a sign known as

- a- Boyce's sign.
- b- Moure's sign
- c- Greisinger's sign
- d- kernig sign.

#### 12- Attacks of stabbing pain in the tonsillar area suggest

- a- Acute tonsillitis
- b- Trigeminal neuralgia
- c- Glossopharyngeal neuralgia
- d- Quinsy.

#### 13- A 50 years old female has dysphagia for liquids and can swallow solids relatively well. This suggests

- a- Hypopharyngeal tumour
- b- Neurologic impairment
- c- Pharyngeal pouch
- d- Stenosis of the esophagus

#### **ANSWER**

#### **Anatomy**

1a, 2b, 3 c, 4 c, 5 a, 6 b, 7 d. **Inflammatory** 1a, 2b, 3a , 4c , 5 c, 6a, 7d, 8 b, 9 d, 10 d, 11b, 12d, 13 c, 14 b, 15b, **Tonsils** 1b, 2b, 3b, 4b, 5 c, 6c, 7 d, **Trachea** 1c **Neoplastic** 1c, 2d, 3c, 4d, 5d.

#### Miscillaneous

1c, 2d, 3d, 4b, 5a, 6 a, 7c, 8b, 9c, 10b, 11a



#### **1-ANATOMY**

- 1- The only abductor muscle in the larynx is:
  - a- Sternothyroid muscle.
  - b- Lateral cricoarynoid muscle.
  - c- Cricothyroid muscle.
  - d- Posterior cricoarynoid muscle.
- 2- One of the following is not a part of the laryngeal skeleton
  - a-Thyroid cartilage
  - b- Cricoids cartilage
  - c-Arytenoids cartilage
  - d- Hyoid bone.
- 3- The largest of laryngeal cartilages is
  - a-Thyroid cartilage
  - b- Cricoids cartlage
  - c-Epiglottis
  - d- Corniculate cartilage.
- 4- The cricothyroid muscles has its nerve supply from
  - a-The external laryngeal nerve
  - b- The internal laryngeal nerve
  - c-The recurrent laryngeal nerve.
  - d- None of the above.

#### 2-CONGENITAL

- 1- An infant soon after birth develops inspiratory stridor which improves on lying on prone position. The infant cry was normal. Temperature was 37, you should suspect
  - **a-** laryngeal web.
  - **b-** Laryngomalacia.
  - **c** acute laryngitis.
  - d- posterior laryngeal cleft.
- 2- The most common congenital laryngeal anomaly is
  - a- Laryngeal web.
  - b- Laryngomalacia.
  - c- Subglottic stenosis.
  - d- Subglottic hemangioma.

#### **3-INFLAMMATORY**

- 1- A 3 years old boy complained of sudden acute respiratory distress, with spasmodic cough, cyanosis & acting accessory respiratory muscles is most probably due to:
  - a- acute follicular tonsillitis.
  - b- foreign body inhalation.
  - c- adenoid hypertrophy.
  - d- vocal cord nodule.
  - e- laryngeal web.

#### 2 - A 2 years old boy having acute laryngitis

- a- is treated at the outpatient clinic.
- b- Hospitalization is essential
- c- The condition is self limiting.
- d- Antibiotic, corticosteroids and reassurance are sufficient

#### 3-The causative organism of acute epiglottitis is

- a- streptococcus pnemoniae
- b- hemophylus influenza
- c- staph aureus
- d- Morexella cattrhalis.

#### 4-Perichondritis of the larynx may be caused by

- a- cut throat wound.
- b- high tracheostomy.
- c- radiotherapy.
- d- all of the above.
- 5- A 50 years old male who presented with hoarseness of voice of more than one month duration, should be subjected to
  - a- medical treatment and follow up.
  - b- endoscopic laryngeal examination.
  - c- vocal rehabilitation.
  - d- none of the above.

#### 4-TRAUMATIC

#### 1-Respiratory distress may follow all of the following except

- a- Compression trauma of the larynx
- b- Penetration trauma of the larynx
- c- Inhlation of irritant gases
- d- Abuse of voice.

#### 2-The aim of Hemlich's Manoeuvre is to

- a- Move the larynx from side to side to assess for laryngeal click.
- b- Apply a sudden subdiaphragmatic upward thrust to produce artificial cough.
- c- Forward pull of the mandible to clear the upper airway
- d- None of the above is true.

#### 3-A foreign body in the bronchus

- a- is dislodged in the left bronchus more than the right bronchus.
- b- Mostly seen in adults
- c- Chest x ray is recommended
- d- None of the above.

#### **5-SYMPTOMATOLOGY**

#### 1- The early Manifestations of laryngeal obstruction includes all of the following except

- a- Working ala nasi
- b- Retraction of intercostals spaces.
- c- Congested neck veins.
- **d-** Cyanosis.

#### 2- Biphasic stridor is characteristic of

- a- Laryngomalacia.
- **b-** laryngeal web.
- **c-** Acute laryngo-tracheobronchitisacute epiglotitis
- **d-** None

#### 3-Aphonia is a symptom of

- **a-** unilateral abductor vocal cord paralysis paralysis.
- **b-** bilateral abductor vocal cord paralysis.
- **c-** bilateral adductor paralysis.
- **d-** all of the above.

#### 6-NEOPLASTIC

#### 1-Laryngeal carcinoma commonly occurs in

- a- elderly females
- b- Elderly males
- c- elderly smokers males
- d- young adult males.

#### 2- The commonest site of laryngeal carcinoma is

- a- Supraglottis
- b- Glottis
- c- Subglottis
- d- Laryngeal surface of the epiglottis.

#### 3-Predisposing factors of laryngeal carcinoma include all of the following except

- a- Smoking
- b- Alcohol
- c- Gastro-esophageal reflux
- d- Hypochromic anemia.

#### 4- Hoarseness is an early symptom in

- a- Glottis carcinoma
- b- Suprglotic carcinoma
- c- Subglottic carcinoma
- d- Postcricopid carcinoma.

#### 5-Dyspnea is an early symptom in

- a- Glottis carcinoma
- b- Suprglotic carcinoma
- c- Subglottic carcinoma
- d- Postcricopid carcinoma.

#### 6- Absent laryngeal click may suspect:

- Supraglottic carcinoma
- b- Pyriform fossa tumor
- c- Subglottic cancer
- Post-cricoid carcinoma

#### TRACHEOSTOMY

#### 1- laryngeal stenosis due to perichondriris may be due to

- a- High tracheostomy.
- b- Mid tracheostomy.
- c- Low tracheostomy.
- d- Prolonged use of a cuffed tube.

#### 2-The ideal site of tracheostomy is at

- a- the 1st and 2<sup>nd</sup> tracheal rings. b- the 2<sup>nd</sup> and 3<sup>rd</sup> tracheal rings. c- the 3<sup>rd</sup> and 4<sup>th</sup> tracheal ring. d- the 4<sup>th</sup> and 5<sup>th</sup> tracheal rings. e- the 5<sup>th</sup> and 5<sup>th</sup> tracheal rings.

#### 3- The adult trachea

a- is about 10 cm length

- b- is formed of 16-20 complete circular rings
- c- Lies behind the esophagus.
- d- All are true

#### 4-In a deeply comatose patient, tracheostomy is made to avoid

- a- Bronchopneumonia
- b- Aspiration pneumonia
- c- Pulmonary edema
- d- Respiratory failure.

#### 5-In severe head injury, tracheostomy is performed

- a- to prevent aspiration
- b- for repeated suction.
- c- For assisted ventilation
- d- All

#### 6-The aim of tracheostomy in obstructive sleep apnea is

- a- to prevent aspiration
- b- for repeated suction.
- c- For assisted ventilation.
- d- To by-pass the airway obstruction.

#### 7-which type of tracheostomy is preferred in cancer larvnx

- a- High tracheostomy.
- b- Low tracheostomy.
- c- Mid tracheostomy.
- d- Any type is suitable.

#### 8-which type of tracheostomy is indicated in subglottic carcinoma

- a- High tracheostomy.
- b- Low tracheostomy.
- c- Mid tracheostomy.
- d- Any type is suitable.

### 9-A patient complaining of persistent dyspnea after tracheostomy, the tracheostomy tube is clean, and there is diminished air entry on chest auscultation. You suspect

- a- Surgical emphysema
- b- Pneumohorax
- c- Air embolism
- d- All are true.

#### 10- About mid-tracheostomy one of the following statements is not correct

- a- It is performed behind the thyroid isthmus
- b- It is performed in the 3<sup>rd</sup>& 4<sup>th</sup>tracheal rings
- c- It is less liable to injure the dome of the pleura
- d- It is easy and rapid as compared to high tracheostomy.

#### **ANSWER**

Dr Mossad

Anatomy1d, 2d, 3 a, 4 a Congenital 1b, 2b Inflammatory 1b, 2b, 3b, 4d, 5bTraumatic 1d, 2b, 3 c Symptomatology 1d, 2c, 3c Neoplastic 1c, 2b, 3d, 4a, 5c Trachea 1 a, 2 c, 3a, 4b, 5 d, 6d, 7 a, 8b, 9b.

