(1)

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Q NO 1

Ans

Structure of Human Ear

=> It is organ of hearing and equilibrium.
=> that detect and analyze sound by tranduction.
=> that sound waves convert into electrochemical impulse.
=> maintanance the sence of blance.

Structure of Ear

Ear Consist of three portions.

(1) External Ear
(2) middle Ear
(3) interal Ear.

(1) External Ear

It Consist of pinna, external auditory meatus and Tympanic membrane.

(i) pinna:

The pinna is a projecting elastic cartilage covered with skin.

=> the outer prominent ridge is called as helix.

=> It is sensitive and effective in collecting sound waves.

=> the lower end is composed of fibrous and adipos tissue supplied with blood capillierse.

(ii) External auditory meatus:

=> It is tubular pathway.

=> Supported by Cartilage in exterior part

=> bone its interior part.

=> The canal internally lined with hairy skin and also ceruminous gland.

=> the latter modified sweat gland secreat waxy substance.

=> It prevent foreign bodies entering to ear.

(iii) Tympanic membrane.

=> The Tympanic membrane separate the Tempanic cavity from external auditory meatus.

=> the central part of Tympanic is called the umbo.
It is thin and semitransperant, almost oval.

(2) Middle Ear

(i) Tympanic cavity, filled with air is attached with nasopharynx through auditory tube.

=> Seves to equlize the air pressure in the Tympanic cavity on outside

(ii)

Three small bone present in ear, it is flexible

1. Mellus
2. Incus
3. Stapes

=> The mellus attached with Tympanic membrane on one side
=> The incus attached with other side.
=> Stapes is smallest bone of the body.
=> The Stapedius attech with Stapes.
=> The Stapdius muscle is smallest muscle of the body.
=> The middle ear attached with inner ear.

(3) Inner Ear

The labyrinth membrane present in inner Ear.
it consist of

(i) **Semicircular Ducts.**

they are three

Semicircular ducts
anterior, posterior
and lateral.
=> they arise from
the utricle
=> the anterior and
posterior arise from
Crus Commun.

(ii) Utricle

It is present dorsally
=> all the three
Semicircular Structure
are Connect with
Utricle.
=> the Saccula is
ventrally located.
=> ~~It~~ which join
with Utricle and
Saccula to Utriculosaccular
duct

(iii) Cochlea:

=> it is main hearing
Organ
=> It is attech with
Saccula

=> it is spirally coiled that resemble Sonil shell
=> It Taper from broad base in almost apointed apex.
=> internal Consist of
=> (1) three fluid filled Chember
(1) The upper scala Vestibuler
(2) The lower scala Tympani
(3) middle scala media.

QNO 5

Ans

Importance of Radiology.

Radiology is the most important in medical feild
=> Radiology plays a huge role in disease mangment by giving Physicians more options tools.
=> Diagnostic imaging allows for detailed information about Structure of disease.

=> The ability of diagnosis during early stages, Parents may be Saved without radiology, this may not be possible.

=> Diagnostic Imaging allows for better treatment and better look.

=> Radiology is not only vital medical care

=> ~~Importa~~ Importance of radiology, is a Series of diffrent test that take a images of various body parts.

=> Many of these test the doctor see inside the body.

=> A Number of diffrent imaging exam can be used.

=> Including X-ray, MRI, CT Scan. Ultrasound, mamography. Sonography, Nuclear medicine, Fluroscopy, and also PET Scans.

=> Diagnostic Imaging provide detailed information about Structural diseas.

=> Radiology role Control disease mangment.

=> Early diagnosis ~~does~~ Save live.

=> Without diagnosis there Can be no treatment.

=> Image interpretation is the most visible Contribution of radiologists.

=> The Population Shald be informe about the Importance of radiology.

Q NO 2

Ans

Submandibular Gland.

=> The Submandibular gland is located in face.

=> Their mixed Serous and mucous Secretion is important for lubrication of food.

=> It is also effect swallowing and aid digestion.

position:.

=> Submandibular gland located with the anterior part of Submandibular triangle.

* **Superiorly:** Inferior body of the mandible.

* Anteriorly:. Anterior belly of the digastric muscle.

* Posteriorly:. Posterior belly of the diagastric muscle.

Structure:.

⇒ The Submandibular gland are pair.
⇒ it is elongated.
⇒ it is flattend hook.
⇒ it have two set of aram. i-e Superfacial and deep.
⇒ The aram is relation with mylohyoid mucle.

① Superfacial aram:.

it Consist the greater portion of gland.
⇒ it is lies partially inferior to the posterior half of mandible.
⇒ impression present on medial aspect.

⇒ it is Situted outside the boundries of oral cavity.

② Deep arm:.

it is hooks around posterior margins of mylohyoid through triangular aperture to enter the oral cavity.

⇒ it lies on the lateral surface of the hypoglossas , Lateral to the root of tongue.

Nerves:

⇒ the Submandibular gland and duct Share relation with three nerve.

(i) Lingual Nerve
(ii) Hypoglossal Nerve
(iii) Facial Nerve

Vasculature:

Artery: Blood supply via to Submental artery.

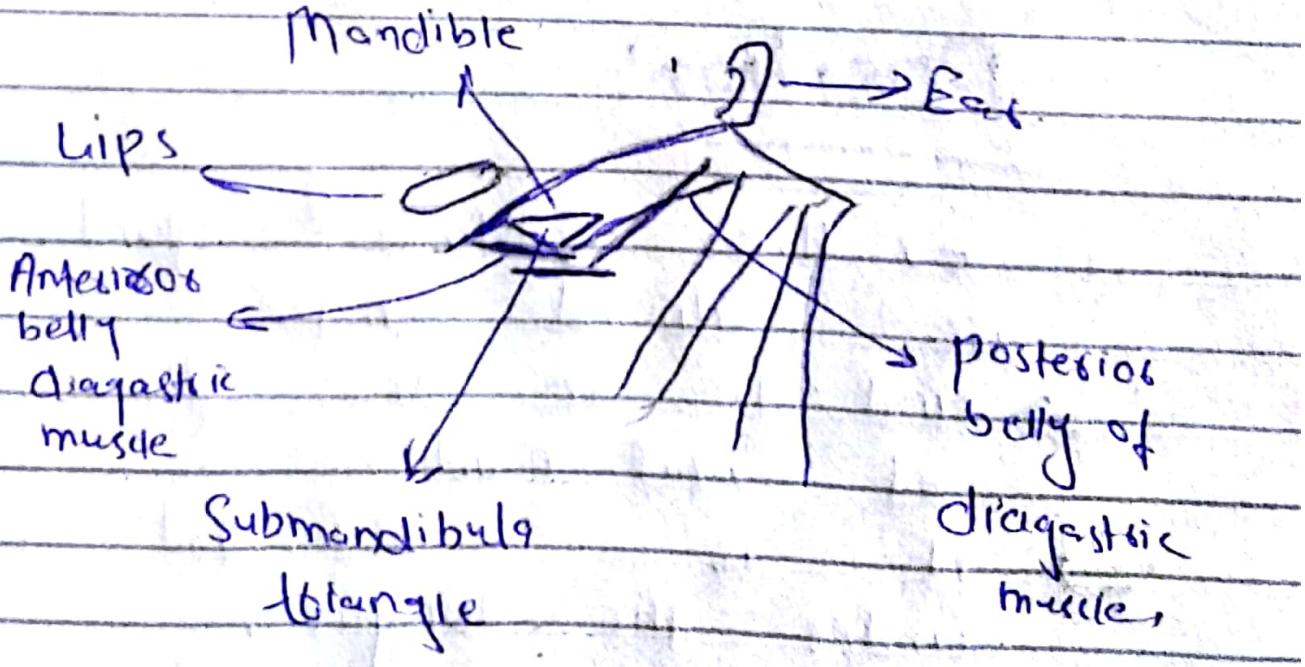
⇒ the Submental artery arise from facial artery,

⇒ a branch of external Carotid artery.

Veins.

Venous drainage is through the Submental vein

⇒ it axis from facial vein. and then internal Jagular veins



Sublingual Gland:.

⇒ the Sublingual gland is the Smallest gland in Salivary gland.

⇒ it is ~~situ~~ situated deeply.

⇒ it Secretion is important for lubriction of food.

⇒ Keeping the oral mucous moist and digistion.

Position:

⇒ the Sublingual gland are almond shape

⇒ and lie on the floor of oral cavity.

⇒ it is located under the tongue.

⇒ Lateral border by mandible

⇒ and medial border by genioglossus muscle of Tongue

⇒ The Sublingual gland Shallow groove on medial surface of mandible is known as Sublingual fossa.

Structure:

The gland single mass though horseshoe configuration is called as lingual frenulum.

⇒ The superior aspect is u shap form.

⇒ elongted crest membrane is called as Sublingual folds.

⇒ The Sublingual fold extend from posteriolateral position and transiver anteriorly joint the Sublingual papillea.

Nerve:

The lingual nerve pass to medial aspect of Sublingual gland.

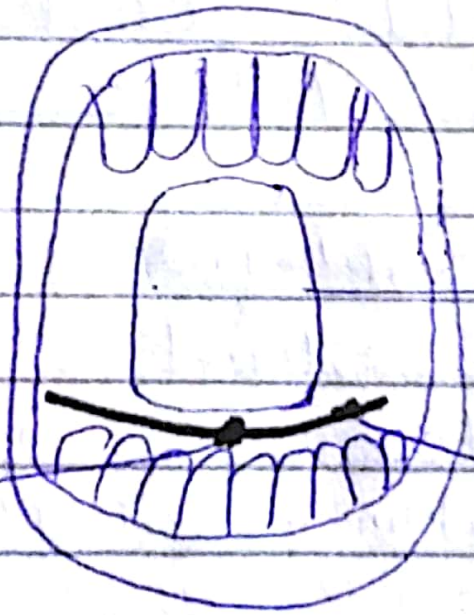
Vasculature.

Artery:

Arterial supply via to Sublingual and Submental artery

Vein:

Venous drainage is Sublingual and Submental veins.



Q NO3

Ans

Formation of stone within the duct system one of the most frequent disorder of the salivary gland.

=> the salivary gland consist of three pair gland.
- => parotid gland
- => Submandibular gland
- => Sublingual gland.

=> So the majority of stone effect the Submandibular gland located at the floor of mouth.

=> Many people with the condition have multiple stone.

⇒ the Submandibular gland Stone are more Common the other Salivary gland.

⇒ beacuse of the Secreation are more serous then mucoid Saliva of the Submandibular gland.

⇒ the Submandibular gland Secreation is important role for lubrication of food.

⇒ the Stone formation is exact cause as unknown.

⇒ Partial obstruction cause the gland inflat itself Stimulat secrete Saliva, as occur in eating.

Q No 4

Ans

Vertebral Column:

⇒ the vertebral Column consist of 33 vertebrae.

⇒ these vertebrae Separated by intervertebral discs.

⇒ the vertebral Column Can be Classified into 5 five Section.

Function:

① protection:
vertebral Column protect the Spinal Cord and Spinal canal.

② Support.
it Carries the weight of body above the pelvis.

(3) Axis:
The central axis of body.

(4) Movement:
has a roles in both posture and movment.

Structure of vertebrae:

Each vertebrae Consist of anterior vertebral body and posterior vertebral arch.

(1) vertebral body:

=> Each vertebrae form anterior vertebral body.
=> it is the weight bearing component.
=> The vertebra lower portion of column has larger bodie than the upper portion.

⇒ the Superior and inferior aspect of vertebral body are joind by hyaline cartilage.

⇒ Adjecent vertebral bodies are separated by fibrocartilaginous intervertebral disc.

(2) Vertebral arch:

⇒ The vertebral arch form the lateral and posterior aspect of each vertebrae.

⇒ the Combination of vertebral body and vertebral arch to form vertebrae.

⇒ the foramina of all vertebrae line up to form the vertebral canal. which encles the spinal cord.

The vertebral arch have bony prominence
⇒ the attechment site of muscle and ligaments

✱ Spinous process.

Each vertebra has a single spinous process
⇒ centerd posteriorly at the point of arch.

✱ Transverse process

⇒ Each ~~transverse process~~ vertebrae has two Transver process
⇒ it extend laterally and posterior.
⇒ it articulat with ribs.

✱ Pedicle:

Conned the vertebral body to the Transverse process

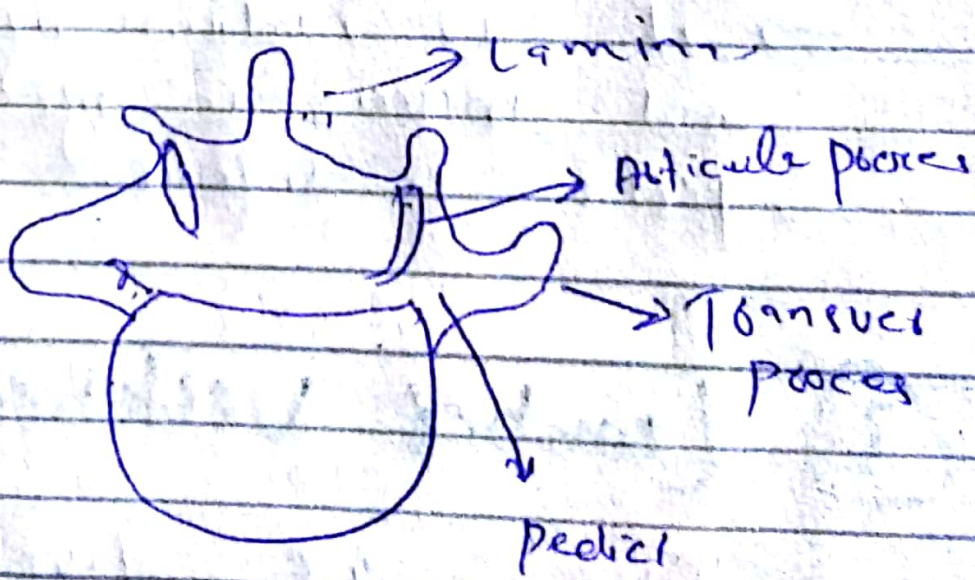
Lamina:

Connect the Transverse and Spinous Process.

Articular process

= Forms joint one Vertebra and its superior and inferior Counterparts.

⇒ The articular process located at the intersection of the lamina and pedicle.



Structure of Vertebra.

Classification.

① Cervical Vertebra.

⇒ There are Seven cervical Vertebrae in human body.

② Thoracic Vertebra

There are twelve thoracic vertebra.

⇒ it is medium sized, and increas in size from superior to inferior.

③ Lumber Vertebrae.

There are five Lumber vertebrae.

⇒ it is largest Vertebral Column.

⇒ it suppord to the ~~weight~~ Weight

(4) Sacrum and Coccyx:

The Sacrum is Collection of five fused vertebrae.

=> The Coccyx is small bone which articulated with the apex of Sacrum.

=> it is recognized by the lack of vertebral arches.

Thanks you