Syllabus of Human Anatomy . Second year students

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Neuroanatomy : **Theory = 30 lec Practice = 7-8 lab**

Topics	theory
** Introduction Nerve cells .	1 hr
Definition	
types of cells	
types of neurons , functions ,	
terms related to neurology.	
Nervous tissue	1 hr
Classification.	
Parts of central nervous	
Neuroglial cells ,types ,functions	
**Meninges and dural folds: Definition. Parts ,functions ,	1 hr
Blood supply ,nervous supply	
Applied anatomy	
** Cranial venous sinuses	1 hr
Definition. , Classification	
Termination, direction of blood flow in cranial venous sinuses	
Communication , clinical notes	
** Divisions of brain	1 hr

Forebrain

Midbrain

Hindbrain

Cerebral hemispheres: 1 hr

Defintion.

External features . lobes

Cerebral cortex 1 hr

Functional area of cerebral hemispheres

Applied anatomy

Internal structure of cerebral hemisphere 1 hr

Fibers . types

***Basal ganglia 1 hr**

types , arrangement

functions

Ventricles of brain 1 hr

types . relation and boundaries

functions

contents

Brain stem 1 hr.

definition , parts , functions and relation

pons 1 hr

definition, gross appearance ,

internal structure

function and related structures.

**** Medulla oblongata 1 hr**

Definition, gross appearance ,

Internal structure , function,

related structures.

**** Hindbrain 2 hr**

*** *cerebellum**

Definition, gross appearance

Anatomical classification

Functional classification

Parts , internal structure , function

Clinical notes related

Diseases related

****Blood supply of the brain**

Arteries involved

Veins involved

**** Circle of Willis 1 hr**

Communications

Clinical notes.

**** Cerebrospinal fluid 1 hr**

Definition, Circulation

Absorption

Function

Clinical notes related to cerebrospinal fluid

**** Spinal cord; 2 hr**

External features

Ligaments related

Mechanism of support

Relation of spinal cord to vertebral column.

Function

Clinical notes

**** Internal structure**

**** Tracts of spinal cord 1 hr**

**** Pyramidal and extrapyramidal tract 1 hr**

**** pathway of pain and temperature . 1 hr**

**** Pathway of touch 1 hr**

**** *Pathway proprioception 1 hr**

Differences between these tracts

Clinical notes

**** Cranial nerves: 6 hr**

Definition, types

Arrangement

- **Each cranial nerve ,**
- **origin**
- **insertion**
- **pathway**
- **area of supply**
- **function**

- **Lesions related**

*** * Autonomic nervous system; 1 hr**

Definition, classification , differences , clinical notes

<u>HEAD AND NECK</u>

Theory = 16 Practicle = 10

Lecture 1: Scalp

Introduction

Layers of scalp

Skin

Superficial fascia

Epicranial aponeurosis & Occipito Frontalis muscle

Layer of avascular loose areolar tissue & subaponeurotic space

Periosteum "Pericranium"

Blood supply of the Scalp

Arterial supply

Venous drainage

Lymphatics

Nerve supply of the Scalp

Lecture 2: The Face

Introduction

Layers of the face

Skin

Muscles

Subcutaneous tissue

Deep fascia

Sweat & sebaceous glands

Mucocutaneous junction

Mucus & Salivary glands

Blood supply of the face

Arterial supply

Venous drainage

Lymphatic drainage

Sensory innervations of the face

Motor innervations of the face

Muscles of facial expression

Embryology

Morphology

Arrangement

Muscles around the Orbit

Muscles around the Nose

Muscles around the Mouth

Sensory innervations of the Face
Trigeminal nerve (V)
Ophthalmic division: Va
Maxillary division: Vb
Mandibular division: Vc
Greater auricular nerve: C2

Lecture 3: Parotid gland

Introduction

Surfaces

Lobes

Superficial lobe

Deep lobe

Glenoid lobe

Parotid fascia

Accessory gland

Structures within the Parotid gland
Superficial relation of the gland

Deep relation "The bed of the gland"

Parotid Duct

Blood supply

Arterial supply

Venous drainage

Lymphatics

Nerve Supply

Facial nerve ; Extra cranial course

Branches of the facial nerve
Facial palsy & Types of facial nerve injuries

Lecture 4 & 5: Oral Cavity
The mouth

The vestibule

The mouth proper:

Gingiva (gum)

The Teeth

The Palate

Introduction

Hard palate

Soft palate,

Muscles of the soft palate

Action of palatal muscles

Nerve supply

Blood supply

The Tongue

Introduction

Muscles of the tongue

Blood supply of the tongue

Arterial supply

Venous drainage

Lymphatic drainage

Nerve supply

Function of the tongue

Submandibular gland

Submandibular duct

Relations

Superficial part

Deep part

Arterial supply

Venous drainage

Lymphatics

Nerve supply

Sublingual gland

Relations

Muscles of the floor of the mouth

Lecture 6: Muscles of mastication

Introduction

Masseter muscle

Temporalis muscle

Lateral pterygoid muscle

Medial pterygoid muscle

Buccinator

Lecture 7: The neck

Boundaries

Deep cervical fascia: (fascia of the neck)

Investing layer.

Pretracheal fascia.

Prevertebral fascia.

Carotid sheath.

Tissue spaces of the neck.

Lecture 8: Anterior triangle of the neck

Introduction

Subdivisions of the anterior triangle

Submental triangle

Digastric (Submandibular) triangle

Carotid triangle

Muscular triangle

Infra hyoid muscles

Action of infra hyoid muscles

Digastric muscle

Lecture 9: Posterior triangle of the neck

Introduction

Contents of the posterior triangle

Lymph nodes

Accessory nerve

Cervical plexus

Muscular branches

Cutaneous branches

Sternocliedomastoid muscle

Lecture 10: Thyroid gland

Introduction

Thyroid Lobe

Pyramidal lobe

Accessory thyroid gland

Blood supply

Arterial supply

Venous return

Lymphatics

Nerve Supply

Parathyroid glands

Points of surgical importance

Lecture 11: The Larynx

General description

Structure

Thyroid cartilage

Cricoid cartilage

Epiglottic cartilage (Epiglottis)

Arytenoid cartilage

Interior of the larynx

Blood supply

Lymphatics

Movements of the larynx

Function of the larynx

Lecture 12: The Pharynx

The wall of the pharynx

Superior constrictor

Middle constrictor

Inferior constrictor

Salpingopharyngeus, Stylopharyngeus & Palatopharyngeus

Functions of muscles of the pharynx

Relation of the structures to the pharynx

The Interior of the pharynx
Nasophary

Oropharynx

Laryngopharynx

Blood supply

Nerve supply

Lymphatic drainage

Lecture 13: The Nose

The external nose

Skeleton of the nose

The nasal cavities

roof

The floor

The medial wall The lateral wall

Nerve supply

Blood supply

Lymphatic drainage

Lecture 14 & 15: The Ear

The External Ear

The Middle

Lateral Wall

Medial Wall

Anterior Wall

Posterior Wall

The Roof The Floor

Ossicles of the middle ear

Auditory tube (Eustachian tube)

The Internal Ear

Bony labyrinth

Membranous labyrinth

Lecture 16: Lymphatics of the head & neck

Lymph nodes of the head & neck

Superficial circular chain

Vertical chain

Deep circular chain

Lymphatic drainage of the face

Abdomen **20 lectures**

<u>Anterior abdominal wall</u>

Theory = 5 **Practicle= 2**

Lecture 1: General Surface land marks of anterior abdominal wall

Abdominal lines and planes, Vertical lines, Horizontal planes, Trans pyloric plane, Subcostal plane, Intertubercular plane, Regions of anterior abdominal wall

Lecture 2: Anterior abdominal wall:

Skin:Texture & Natural cleavage lines, Nerve supply, Blood Supply And Lymphatics

Superficial fascia & divisions

Deep fascia

Muscles of anterior abdominal wall

***External oblique(Superficial inguinal ring, Inguinal ligament, Lacunar Ligament & Pectineal ligament)**

***Internal oblique (Conjoint tendon)**

***Rectus abdominis (rectus sheath, Formation & its three distinct arrangements)**

***Pyramidalis**

***Cremaster muscle**

Lecture 3: Anterior abdominal wall

Function of abdominal muscles, Neuro vascular plane of abdominal muscles

Deep lymphatics of anterior abdominal wall

Transversalis fascia

Extraperitoneal fat

Inguinal Canal: Walls, Deep inguinal ring, Functions of Inguinal canal and Mechanics of inguinal canal

Spermatic Cord

Coverings of the spermatic cord

Structures within the spermatic cord

Lecture 4: Posterior abdominal wall

Formation of posterior abdominal wall

Muscles of posterior abdominal wall

***Psoas major muscle**

***Psoas minor muscle**

***Quadratus lumborum**

Facial lining of abdominal wall, Lumber fascia

Lecture 5:

Abdominal Hernia

Definition, Common types of abdominal hernia

***Indirect Inguinal hernia**

***Direct Inguinal hernia**

***Femoral Hernia**

***Umbilical hernia (Congenital & Acquired)**

***Epigastric hernia**

***Separation of recti**

***Incisional hernia**

***Hernia through linea semilunaris "Spigelian hernia“**

***Lumber hernia “Hernia through Petit's triangle“**

***Internal hernia**

<u>Abdominal cavity</u>

Theory : 15 lec **Prac. : 6 -8 lab**

Peritoneum: 2 hr

Definition, classification , types

lesser sac (omental bursa)

definition , classification ,types

**** greater sac**

Clinical notes, Blood supply , Nerve supply and lymphatics

**** Gastrointestinal tract**

Esophagus 1 hr

Abdominal esophagus , structure, length, Constrictions ,blood supply ,

nerve supply , lymphatics and Clinical notes

**** stomach: 2 hr**

Gross appearance, relation, boundaries, parts, Blood supply, nerve supply , lymphatics , Function and Clinical notes and diseases related.

**** small intestine;**

**** duodenum 1 hr**

Structure, parts , relation and boundaries , blood supply, nerve supply and lymphatics , Function, Clinical notes

**** jejunum and ileum 1 hr**

Differences between them , gross appearance ,relation , blood supply, nerve supply ,lymphatics and function

**** large intestine 1 hr**

Differences between large and small intestine

Cecum

Parts , description, relation ,boundaries , blood supply nerve supply ,

iliocecal valve

*** appendix 1 hr**

structure, shape ,types ,relation , blood supply, nerve supply and lymphatics

*** ascending colon 1 hr**

descending colon

transverse colon

parts , description, relation ,blood supply , nerve supply and lymphatic

***Blood supply of abdomen. 1 hr**

Branches of abdominal aorta

celiac trunk, superior mesenteric artery, inferior mesenteric artery

Venous drainage of abdomen

Porto caval anastomosis, Definition, communications

*** liver 1 hr**

Gross appearance. Relation , divisions , boundaries ,Blood supply

, nerve supply, lymphatics and Clinical notes

*** gall bladder 1 hr**

Structure, relation , blood supply ,nerve supply ,lymph nodes , Clinical notes

*** pancreas 1 hr**

Structure, relation , parts, blood supply, nerve supply and lymphatics

*** spleen : Structure, relation , blood supply , nerve supply function and relation**

*** kidney 1 hr**

Structure , internal structure , parts , relation .blood supply, nerve supply , clinical notes

*** suprarenal gland**

Structure, relation, Blood supply , nerve supply

*** ureters 1 hr**

normal constrictions , structure, blood supply,

nerve supply and lymphatics , Functions , Clinical notes.

Pelvis: Theory 5 prac. 2 lab
Orientation of pelvis, 1 hr

False and true pelvis, structures of pelvic wall, contents of pelvic diaphragm

*** pelvic viscera in male 1 hr**

Sigmoid colon ,rectum , urinary bladder

*** Male genital organs 1 hr**

*** pelvic viscera in female 1 hr**

sigmoid colon ,rectum ureters , urinary bladder, pelvic fascia

***perineum 1 hr**

nerves, sacral plexuses , lumbar plexuses , autonomic nerves, arteries of pelvis ,sex differences of pelvis