

Q1

Page 1

The floor of the Cranial cavity is divided into three

distinct or depressions. They are known as the anterior Cranial fossa, middle Cranial fossa and posterior Cranial fossa. Each fossa accommodates a different part of the brain.

Anterior Cranial fossa

The anterior Cranial fossa is the most shallow and superior of the three Cranial fossa. It lies superiorly over the nasal and orbital cavities. The fossa accommodates the anterior portion of the prefrontal lobes of the brain.

Posterior Cranial Fosse

The posterior Cranial Fosse house the brainstem and Cerebellum.

The brainstem is comprised of the medulla oblongata pons and mid brain and continuous down through the Foramen magnum to become Spinal Cord.

The posterior Cranial fosse is the most posterior and deep of the three Cranial fosse.

Middle Cranial nerves

The middle Cranial fosse is butterfly shaped depression of the skull base which is narrow in the middle and wider laterally. It houses the temporal Lobes of Cerebrum.

Borders

The anterior Cranial fossa consist of three bones The frontal bone, ethmoid bone and Sphenoid bones it is bounded as follow

Anteriorly and laterally

∴ it is bounded by inner surface of the frontal bone.

posteriorly and medially

∴ it is bounded by the Limbus of the Sphenoid bone. The Limbus is a bony ridge that form the anterior border of the prechiasmatic Sulcus.

posteriorly & laterally.

∴ it is bounded by the lesser wings of the Sphenoid bones These are three triangular projection of bones that arise from central Sphenoid body.

Page 1)

Q2. Write note on the Cranial nerves?

Ans 2)

The Cranial nerves are 12 pairs of nerves that can be seen on the ventral (bottom) surface of the brain. Some of these nerves bring information from the sense organs to the brain; other cranial nerves control muscles.

Connected to glands or internal organs such as the heart and lungs.

Following are the names of cranial nerves and also their main functions

(i) Olfactory Nerves.

Smell

(ii) Optic Nerves.

Vision

(2)
(iii) Oculomotor Nerves:-

Eye movement.
Pupil constriction.

(iv) Trochlear Nerves:-

Eye movement

(v) Trigeminal Nerves:-

Somatosensory information
(touch, pain) from the face and
head. muscles for chewing.

(vi) Abducent Nerve:-

Eye movement

(vii) Facial Nerves:-

Taste (anterior 2/3
of tongue) Somatosensory
information from ear.
controls muscles used in
facial expression.

(ix) Glossopharyngeal Nerve:-

~~Glossophary~~
Taste (posterior 1/3 of tongue).
Somatosensory information
from tongue, tonsil, pharynx.
controls some
muscles used in swallowing

(3)

(x) Vagus Nerves:-

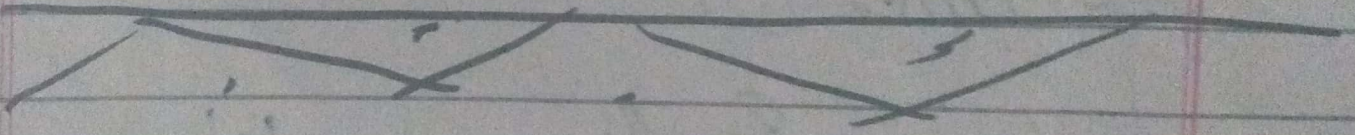
Sensory motor and autonomic functions of viscera (glands, digestion, heart rate)

(xi) Spinal Accessory Nerves:-

controls muscles used in head movement.

(xii) Hypoglossal Nerves:-

controls muscles of tongue



Q3
#

write a note on the
salient feature of
norma frontalis and
~~norma~~ norma occipitalis
of skull?

ANS

Norma Frontalis :-

There are number
of the face but most of
the face but most of them
are very small.

~~the~~ Three of them are worthy
of mention here. These are
the supraorbital, infraorbital
and mental foramina and
they lie on a ventral line

Boundries:-

Superior :-

Top of the skull.

Inferior :-

Orbits and root of nose
and frontal process of the
maxillae.

Laterally :-

Frontal process of the zygomatic
bone.

Features:-

- 1) Frontal Tuberosity or Eminence
- 2) Superciliary Arch
- 3) Glabella
- 4) Nasion
- 5) Supraorbital Margin
- 6) Supraorbital Notch

⇒ Norma Occipitalis:-

It is also called Norma basalis. It is the highest nuchal lines are not always present. They are curved bony ridges situated about 1 cm. above the superior nuchal lines. They begin from the upper part of the external occipital protuberance and are more arched than the superior nuchal lines.

Features:-

- 1) Lambda, Arital Foramina and obelion have been examined in the norma ventricles

(3)

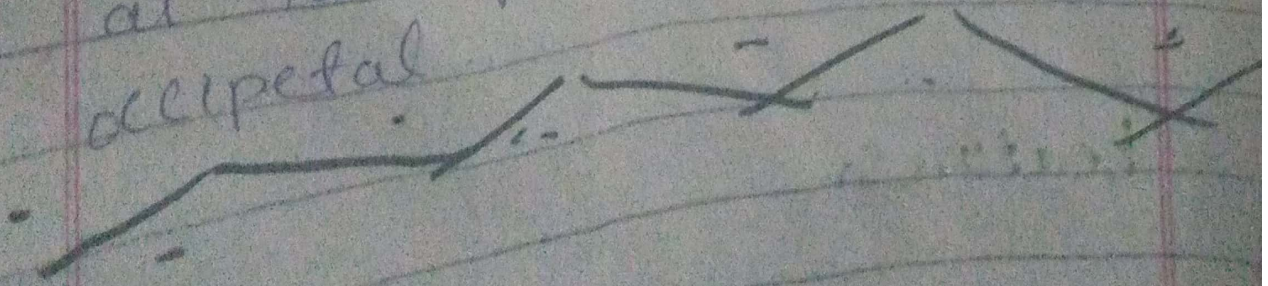
2) The external occipital protuberance is a median prominence in the lower part of the nuchal.

3) The superior nuchal lines are curved bony ~~ridges~~ ridges passing laterally from the protuberance.

4) The occipital point is a median point a little above the nuchal. It is the point farthest from the glabella.

5) The mastoid foramen is located on the mastoid part of the temporal bone at or near the ~~occipital~~ occipito-mastoid suture.

6) The ~~intra~~ interparietal bone is occasionally present. It is ~~largest~~ a large triangular bone located at the apex of the squamous occipital.



Q4: What do you know about the muscles of Hip and knee? 1

Hip Joint:-

The Hip joint is a ball and socket ~~joint~~ synovial joint formed by the articulation between the pelvic acetabulum and the head of the femur.

Muscles:-

Flexion:-

Iliopsoas, Rectus femoris, sartorius, pectineous

Extension:-

Gluteus maximus; ~~Tensor~~ Semimembranosus, semitendinosus and biceps femoris

Abduction:-

Gluteus medius, gluteus minimus, piriformis and tensor of fascia latae

Adduction:-

Adductor longus, brevis and magnus, pectineous and gracilis.

~~Hand~~ Knee Joint:-

The knee is also known as the tibiofemoral joint, is a synovial joint formed between three bones: the femur, tibia and patella.

Muscles:-

- o Quadriceps femoris group (Rectus femoris, vastus lateralis, vastus medius and vastus intermedius). These muscles help to extend the knee.
- o Hamstring group of muscles (Semitendinosus and biceps femoris). These muscles help to flex the knee.
- o Popliteus: A muscle located behind the knee which "unlocks" the fully extended knee joint, allowing for flexion.

Q.5) write a comprehensive
on the femoral triangle

(Ans) 5)

The femoral triangle is a hollow area in the anterior thigh. Many large neurovascular structures pass through this area and can be accessed relatively easily. Thus it is an area of both anatomical and clinical importance.

In this article we shall look at the borders contents and clinical correlations of the femoral triangle.

Borders:

As this area is a triangle. It has three borders
↳ Superior Border:

Formed by the inguinal ligament. The ligament runs from the anterior superior iliac spine to the

(2)

Pubic tubercle.

⇒ Lateral border ⇒

Formed by the medial border of the Sartorius muscle.

⇒ Medial border ⇒

Formed by the medial border of the adductor longus muscle. The rest of this muscle forms part of the floor of the triangle.

It also has a floor and a roof.

⇒ Roof ⇒

Anteriorly, the roof of the femoral triangle is formed by the beas fascia lata.

⇒ Beise ⇒

Posteriorly, the base of the femoral triangle is formed by the pectineus, iliopsoas and adductor longus muscles.

(3)

Contents:-

Femoral Nerve:-

Innervates the anterior compartment of the thigh, and provides sensory branches for the leg and foot.

Femoral artery:-

Responsible for the majority of the arterial supply to the lower limb.

Femoral vein:-

The great saphenous vein drains into the femoral vein within the triangle.

Femoral canal:-

A structure which contains deep lymph nodes and vessels.

The femoral artery, vein and canal are contained within a fascial compartment, known as the femoral sheath.

Name: 1202 Ali Shah

ID: 16283

Department: Radiology

Section: B