

Suboccipital Region

Ligamentum Nuchae: 3 borders

- * superior border attached to the external occipital protuberance
- * anterior border attached to posterior tubercle of atlas and the spines of cervical vertebrae
- * free posterior border, which extends from external occipital protuberance to tip of spine of 7th cervical vertebrae

Suboccipital Triangle

Triangular muscular space situated deep in the suboccipital region of neck, one on each side of midline formed by 4 suboccipital muscles.

Boundaries

Superomedial: Rectus capitis posterior major, supplemented by rectus capitis posterior minor

Superolateral: Obliquus capitis superior

Inferior: Obliquus capitis inferior

Roof: formed by dense fibrous tissue, covered by semispinalis capitis medially and splenius capitis and longissimus capitis laterally.

Floors: by (1) Posterior Arch of Atlas
(2) Posterior Atlanto-occipital membrane

Contents

- 1) suboccipital plexus of veins
- 2) suboccipital nerve
- 3) Third part of vertebral artery

Relev

1) Suboccipital Plexus of veins

lies in and around Ale. connects following veins

- Muscular veins from neighbouring muscles.
- Occipital veins
- Internal vertebral venous plexus
- condylar emissary vein from sigmoid sinus
- Deep cervical vein
- Plexus of veins around vertebral artery.

The connection b/w Suboccipital venous plexus and internal vertebral venous plexus serves as a path of antenatal infection in carbuncles of neck.

2) Dorsal ramus of first cervical nerve (suboccipital nerve)

emerges backward between vertebral artery and posterior Arch of Atlas and soon breaks up into fine muscular branches to supply 4 suboccipital muscles and semispinalis capitis

Branch to inferior oblique joins the greater occipital nerve.

3) Third part of the vertebral Artery.

Appears in foramen transversarium of atlas vertebrae. turns backward and medially behind the lateral mass of atlas; lodges in a groove on posterior Arch.

leaves the Ale by passing deep to lateral edge of post Atlantooccipital Mem
other structures

- First cervical nerve
- greater Occipital nerve
- Occipital artery in the suboccipital region
- Arterial anastomosis around semispinalis capitis external carotid & subclavian.

Cisternal puncture: when fails to take CSF from through puncture for therapeutic and diagnostic purpose.

SubOccipital Muscles	Origin	Insertion	Action
RCP major	Spine of axis	Lateral Part of inferior nuchal line	extends head at atlanto occipital joint membrane (AOJ)
RCP minor	Posterior tubercle of Atlas	Medial Part of inferior nuchal line	"
Obliquus capitis inferior	Spine of Axis	Transverse process of atlas	Rotates the head to same side @ AOJ
Obliquus capitis superior	Transverse process of Atlas	between superior & inferior nuchal lines	Rotates the head to same side @ AOJ, extends head @ AOJ