THE EDINBURGH STEREOSCOPIC ATLAS OF ANATOMY

Section -II -- No. 10

HEAD AND NECK.

SPINAL CANAL-No. 1.

THE SPINAL CANAL HAS BEEN OPENED FROM BEHIND, AND THE UPPER PART OF THE SPINAL DURA MATER EXPOSED.

The spinal dura mater is a tough and strong fibrous membrane, which is separated from the periosteum of the spinal canal by fat, connective tissue, and venous plexuses. It is attached around the margin of the foramen magnum, and there becomes continuous with the deep layer of the cranial dura mater.

It is pierced by the roots of the spinal nerves, and at these places becomes continuous with the connective tissue sheaths of the nerves, and between the atlas and the occipital bone it is pierced by the vertebral artery on either side.

Nerves.—The first or suboccipital cervical nerve escapes from the spinal canal between the occipital bone and the posterior arch of the atlas vertebra, and lies below and behind the vertebral artery. The posterior primary division, which is larger than the anterior, passes backwards and appears in the suboccipital triangle. It does not divide into internal and external divisions, as do the other spinal nerves except the second, and it supplies the muscles which bound the suboccipital triangle, and in addition, the rectus capitis posticus minor and the complexus muscles.

The second cervical nerve emerges between the neural arches of the first and second cervical vertebræ. The posterior primary division, which is larger than the anterior, has already been shown in the suboccipital triangle, and has been removed. The anterior division winds round the outer side of the vertebral artery. The spinal accessory nerve is seen passing downwards and backwards, under cover of the posterior belly of the digastric muscle, and disappearing into the substance of the sterno-mastoid.

Vertebral artery.—In this part of its course, this vessel is seen escaping from the foramen in the transverse process of the axis and passing upwards and outwards to enter the foramen in the atlas. Emerging from this, it runs horizontally backwards and inwards round the outer side and back of the superior articular process of the atlas, and piercing the dura mater, it enters the spinal canal.

The figures indicate-

9. Internal jugular vein.

1. Dura mater. 2. Vertebral artery. 3. Arch of atlas vertebra, divided. 4. Ganglion of second cervical nerve. 5. Anterior division of first cervical nerve.

6. Anterior division of second cervical 10. Rectus capitis lateralis. 11. Nuchal portion of occipital bone. nerve. 12. Posterior division of suboccipital 7. Digastric muscle. 8. Spinal accessory nerve. nerve.



