

The *Spinalis colli* in *Arctocephalus* branches off from the spinalis dorsi between the 2nd and 3rd dorsal vertebræ, passes forwards, receives additional fibres from the posterior cervical spine, surmounts them, and ends on the neural spine of the axis. It is *inserted* into the anterior cervical spines as far forwards as the axis.

The *Complexus* in *Phoca vitulina* lies above the rectus capitis posticus major, and beneath the splenius capitis and trachelo-mastoid. It is a fleshy band, and *arises* from the zygapophyses of the 3rd to the 7th cervical vertebræ by fleshy digitations. The fibres proceed to the occipital region, and are *inserted* by tendon in its inner three-fourths and by muscular fibres in its outer fourth into the back of the interparietal element of the occipital bone, and into the occipital ridge, reaching nearly to the root of the zygoma. It is supplied by the internal branches of all the cervical, and a branch of the suboccipital nerve.

In *Arctocephalus* it *arises* from the hyperapophyses of the 3rd, 4th, 5th, 6th, and 7th cervical vertebræ, and the metapophysis of the 3rd cervical. It courses forwards upon the cervical laminae, and is *inserted* by tendon into the occipital ridge to the outer side of the biventer cervicis.

The *Biventer cervicis* in *Phoca vitulina* *arises* by fibres from the anterior zygapophysis of the 7th cervical vertebra, from the posterior zygapophysis of the same, from the anterior and posterior surfaces of the 1st dorsal vertebra, and from the anterior part of the 2nd dorsal vertebra. There are three digitations of origin; at the spine of the axis it unites with the inner border of the complexus and is *inserted* with it. In the large *Phoca vitulina* it *arises* from the zygapophyses of the 1st to the 4th dorsal vertebræ, and joins the complexus opposite the spine of the axis. In a small male *Phoca vitulina* it was absent. The nerve supply is the same as that of the complexus.

In *Arctocephalus* it is long and riband-like. It *arises* from the roots and sides of the neural spines of the 2nd, 3rd, and 4th dorsal vertebræ to the inner side of the trachelo-mastoid, with which it is blended at its origin. It passes forwards to the inner edge of the complexus, and is *inserted* by fibres into the occipital ridge, between the complexus on its outer side and the sagittal suture on its inner.

*The Oblique Rotator Muscle of the Spinal Column.*¹—This muscle is in two layers in *Phoca vitulina* and in *Arctocephalus*, and lies between the neural spines and the zygapophyses. These layers are of a totally different formation in these animals. In *Phoca* the superficial layer is an extensive muscular bundle extending from the caudal to the cervical region, and the deeper layer forms a set of triangular imbricated muscles. In *Arctocephalus* the superficial layer resembles the deeper layer in *Phoca*, and the deep layer is similar of the rotatores muscles in human anatomy.

The *superficial layer* of fibres of the oblique rotator in *Phoca vitulina* lies in the hollow between the neural spines and the zygapophyses, stretching from the caudal region into the cervical under cover of the lumbo-dorsal fascia. In the caudal region the origins are tendinous slips; the first slip *arises* from the rudimentary zygapophyses of the 4th and 5th caudal vertebræ and the dorsal surfaces of the laminae between them, and is *inserted* into the side of the neural spine of the 4th sacral vertebra, the corresponding parts of the 1st, 2nd, and 3rd caudal, and also into the posterior part of the zygapophyses of the 3rd caudal; the second slip *arises* from the zygapophysis of the 3rd caudal vertebra, and is *inserted* into the sides of the neural spines of the 2nd and 3rd sacral vertebræ, and the laminae between the 2nd and 3rd, and 3rd and 4th sacral vertebræ; the third slip *arises* from the zygapophysis of the 2nd caudal vertebra, and is *inserted*

¹ See for the use of this term Sir Wm. Turner's Introduction to Human Anatomy, revised edition, p. 76, 1882.