

anterior ones long and chiefly tendinous, the posterior more muscular. They are *inserted* into the posterior borders of the 11th to the 15th ribs, into the zygapophyses and anapophyses of the 11th to the 15th vertebræ, into the anapophyses of the 1st to the 10th dorsal vertebræ, and into the tips of the dorsal tubercles of the transverse processes of the 3rd to the 7th cervical vertebræ. Some fibres of this muscle seem to take origin along the internal borders of the vertebræ.

The *Transversalis cervicis* or *colli* in *Phoca vitulina* is in part a continuation of the longissimus dorsi, and branches off from it at the 6th rib. It also *arises* by muscular fibres from the dorsal surfaces of the transverse processes of the 1st to the 5th dorsal vertebræ, to the inner side of the tendons of insertion of the longissimus dorsi into the same processes, which if developed would be the anapophyses, and from the anterior halves of the anterior zygapophyses of the 5th, 6th, and 7th cervical vertebræ and the 1st dorsal. It forms in conjunction with the part coming out of the longissimus dorsi a muscular band which advances towards the cervical region, and there lies between the digitations of the serratus magnus on its outer side and the trachelo-mastoid on its inner, and is *inserted* by five tendinous slips into the dorsal tubercles or divisions of the transverse processes of the 3rd to the 7th cervical vertebræ. In the large *Phoca vitulina* it *arises* in addition from the transverse processes of the 6th to the 10th dorsal vertebræ.

In *Arctocephalus* it is a prolongation of the longissimus, and can only be regarded as the part of the longissimus which lies in the region of the neck and is described with it, because there is no slip given off from it as in *Phoca*.

The *Trachelo-mastoid* in *Phoca vitulina* lies between the complexus and the transversalis cervicis. It *arises* from the anterior and posterior zygapophyses of the 3rd to the 7th cervical vertebræ, and the surfaces of the vertebræ between the articular surfaces. It divides into two parts; the portion arising from the 3rd, 4th, and 5th vertebræ is *inserted* into the posterior edge of the transverse process of the axis; the rest goes to the cranium, and is *inserted* into the mastoid process. It is supplied by the external division of the 2nd and 3rd cervical nerves.

In *Arctocephalus* it is called by Murie splenius colli, and *arises* from the 3rd, 4th, 5th, 6th, and 7th cervical vertebræ between the posterior zygapophyses and the hyperapophyses, and from the dorsal surfaces of the laminæ between each vertebra, and from the sides of the roots of the 1st, 2nd, 3rd, and 4th dorsal spines. The last two cervical origins blend with the complexus. It courses anteriorly below the outer border of the splenius, and is *inserted* by a narrow tendon into the inferior part of the occipital ridge behind the external auditory meatus posterior to the insertion of the splenius.

The *Spinalis dorsi* is only found in *Arctocephalus*. It lies between the neural spines and the longissimus dorsi; the dorsal surface is muscular as far back as the 12th rib, from this to the 14th rib it is tendinous and appears continuous with the longissimus; but, by scraping away the muscular fibres which arise from the neural spines, a set of tendons is reached which appears to be the aponeurosis of the longissimus, but can with a little care be parted from it. It *arises* by muscular fibres and by long tendinous slips; the fibres spring from the sides of the neural spines from the 9th to the 12th dorsal vertebræ, the long tendinous slips from the metapophyses of the 11th to the 14th dorsal vertebræ. The muscular fibres are sparse and thin at the posterior extremity, but deepen and expand anteriorly; the tendons of origin lose themselves on the under surface of the muscle. It is *inserted* by small tendinous slips into the sides and tips of the neural spines from the 1st to the 8th dorsal vertebræ; but the 1st, 2nd, and 3rd vertebræ also have fibres inserted into them. A large muscular slip is continued into the cervical region, forming the spinalis colli.