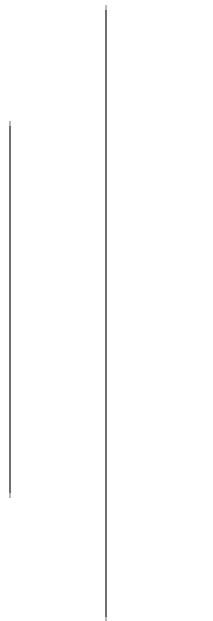




Agriculture and Forestry University

Rampur, Chitwan

STUDY OF SEMISPINALIS MUSCLE



Submitted by

Prashant Kalauni

B.V.Sc. & A.H.(8th Batch)

Roll number: 27

Submitted to

Prof. Dr. Anjani K. Mishra

Assistant Professor

AFU, Rampur

Semispinalis

Semispinalis muscle is a long and largest paired muscle that belong to the deep layer of muscles of the back. It forms the largest and superior component of three parts of semispinalis muscle. It is situated upper and back part of the neck, deep to the splenius, and medial to the longissimus cervicis and longissimus capitis.

Origin – transverse process of the first ten thoracic vertebrae, the articular processes of the last five cervical vertebrae, and the nuchal ligament.

Insertion – the occipital bone near the attachment of the funicular part of the nuchal ligament.

Action – acting singally, to turn and raise the head; together, to extend the head.

Blood supply – deep cervical artery, vertebral and dorsal intercostal arteries.

Nerve supply – dorsal branches of the thoracic and cervical spinal nerves.

Semispinalis cervicis

Semispinalis cervicis is muscle of the back. Along with the semispinalis capitis and thoracis it comprises a long semispinalis muscle. This muscle belongs to the spinotransverse group of deep back muscles, along with the rotatores and multifidus muscles. Semispinalis cervicis acts in synergy with its capitis and thoracis counterparts. Their conjoint function facilitates the movements of vertebral column, extension, lateral flexion and rotation of the head, cervical and thoracic spines.

Origin – transverse process of vertebrae T1-T6

Insertion – spinous processes of vertebrae C2-C5

Action – Bilateral contraction – extension of head, cervical and thoracic spine

Unilateral contraction – lateral flexion of head, cervical and thoracic spine(isolateral), rotation of head, cervical and thoracic spine(contralateral).

Blood supply – occipital, deep cervical and vertebral arteries

Nerve supply – medial branches of posterior rami of spinal nerves

Semispinalis thoracis

Semispinalis thoracis consists of five fascicles bridging over five to six vertebral levels between the transverse and spinous processes of certain cervical and thoracic vertebrae. With these attachments, semispinalis thoracis aids several movements of vertebral column, specifically extension, lateral flexion and rotation of the thoracic spine. Acting together with semispinalis capitis and cervicis, it supports the same movements occurring at the head and neck.

Origin – transverse process of vertebrae T6-T10

Insertion – spinous processes of vertebrae C6-T4

Action – Bilateral contraction – extension of head, cervical and thoracic spine

Unilateral contraction – lateral flexion of head, cervical and thoracic spine(isolateral), rotation of head, cervical and thoracic spine(contralateral).

Blood supply – dorsal branches of posterior intercostal arteries

Nerve supply – medial branches of rami of spinal nerves