

Cervical Afferent Reflexes

Cervico-colic: maintains head position

Cervico-ocular: works with vestibuloocular reflex and optokinetic reflex, acting on the extraocular muscles to assist clear vision with movement

Tonic neck: integrates with the vestibulospinal reflex to achieve postural stability

Visual system is composed of two separate processes, the focal process and the ambient process.

Focal neurologic process

This process represents central vision, primarily the macula of the retina. Relying on central focalization for balance, coordination and posture limits neurologic interpretation from the ambient-spatial orientation system.

Ambient process

This process delivers peripheral retina vision to midbrain, where it becomes part of the sensory-motor feedback loop. It integrates information with kinesthetic, proprioceptive, vestibular and tactile systems for the purpose of orienting and organizing positional processing. Once this is accomplished, a feed forward mechanism enables this information to be directed to higher cortical areas, including the occipital cortex, as well as 99% of the cortex.

-Padula Institute of Vision Rehabilitation

