The fourth cervical dorsal root ganglia are small swellings located on the fourth cervical dorsal roots, proximal to where the dorsal roots join with the fourth cervical ventral roots. The ganglia are situated in the intervertebral foramina between C3 and C4, immediately lateral to the perforation of the dura by the dorsal.

The dorsal root ganglia are formed by the cell bodies of somatic and visceral afferent neurons. Each neuron has a single short axon, which divides into a medial branch, which enters the spinal cord via the dorsal root, and a lateral branch, which passes peripherally to a sensory end organ.