

Rectus capitis lateralis

The rectus capitis lateralis (RCL) is a small posterior cervical muscle that originates from the transverse process of **C1** and inserts onto the **jugular process** of the occipital bone.

Cohen et al., describe the rectus capitis lateralis (RCL) and its anatomical relationships, and discuss its utility as a surgical landmark for safe exposure of the jugular foramen in extended or combined skull base approaches. In addition, the condylar triangle is defined as a landmark for localizing the vertebral artery (VA) and occipital condyle.

Four cadaveric heads (8 sides) were used to perform far-lateral, extended far-lateral, combined transmastoid infralabyrinthine transcervical, and combined far-lateral transmastoid infralabyrinthine transcervical approaches to the jugular foramen. On each side, the RCL was dissected, and its musculoskeletal, vascular, and neural relationships were examined. **RESULTS** The RCL lies directly posterior to the internal jugular vein-only separated by the carotid sheath and in some cases cranial nerve (CN) XI. The occipital artery travels between the RCL and the posterior belly of the digastric muscle, and the VA passes medially to the RCL as it exits the C-1 foramen transversarium and courses posteriorly toward its dural entrance. CNs IX-XI exit the jugular foramen directly anterior to the RCL. To provide a landmark for identification of the occipital condyle and the extradural VA without exposure of the suboccipital triangle, the authors propose and define a condylar triangle that is formed by the RCL anteriorly, the superior oblique posteriorly, and the occipital bone superiorly.

The RCL is an important surgical landmark that allows for early identification of the critical neurovascular structures when approaching the jugular foramen, especially in the presence of anatomically displacing tumors. The condylar triangle is a novel and useful landmark for identifying the terminal segment of the hypoglossal canal as well as the superior aspect of the VA at its exit from the C-1 foramen transversarium, without performing a far-lateral exposure ¹⁾.

¹⁾

Cohen MA, Evins AI, Lapadula G, Arko L, Stieg PE, Bernardo A. The rectus capitis lateralis and the condylar triangle: important landmarks in posterior and lateral approaches to the jugular foramen. J Neurosurg. 2017 Jan 27;1-9. doi: 10.3171/2016.9.JNS16723. [Epub ahead of print] PubMed PMID: 28128694.

From:

<https://neurosurgerywiki.com/wiki/> - **Neurosurgery Wiki**

Permanent link:

https://neurosurgerywiki.com/wiki/doku.php?id=rectus_capitis_lateralis

Last update: **2024/06/07 02:59**

