

# Skull base anatomy

A thorough understanding of [skull base](#) anatomy is imperative to perform a safe and effective skull base approach. In this article, we examine the microsurgical anatomy of the skull base by proposing a modular topographic organization in the median, paramedian, and lateral surgical corridors in relation to transcranial and endoscopic approaches. Methods Five dry skulls were studied focusing on the intracranial and extracranial skull base. Two lines were drawn parallel to the lateral border of the cribriform plate of the ethmoid bone and [foramen lacerum](#), respectively. Lines 1 and 2 delimited the median, paramedian, and lateral corridors of the skull base. The bony structures that formed each corridor were carefully reviewed in relation to the planning and execution of the skull base transcranial and endoscopic approaches. Results The midline corridor involves the [crista galli](#), cribriform plate, planum and jugum sphenoidale, chiasmatic sulcus, tuberculum sellae, sellar region, dorsum sellae, clivus, and foramen magnum. The paramedian corridor includes the fovea ethmoidalis, the root of the lesser and greater sphenoid wing, the anterior clinoid process, the foramen lacerum, the upper half of the petro-occipital suture, and the jugular tubercle. The lateral corridors include the orbital plates, sphenoid wings, squamosal and petrous parts of the temporal bone, caudal aspect of the petro-occipital suture, internal auditory canal, jugular foramen, the sulcus of the sigmoid sinus. Conclusion In-depth three-dimensional knowledge of skull base anatomy based on the modular concept of the surgical corridors is critical for the planning and execution of the transcranial and endoscopic approaches <sup>1)</sup>.

<sup>1)</sup>

Giotto Lucifero A, Fernandez-Miranda JC, Nunez M, Bruno N, Tartaglia N, Ambrosi A, Marseglia GL, Galzio R, Luzzi S. The Modular Concept in Skull Base Surgery: Anatomical Basis of the Median, Paramedian and Lateral Corridors. *Acta Biomed*. 2021 Aug 26;92(S4):e2021411. doi: 10.23750/abm.v92iS4.12115. PMID: 34437364; PMCID: PMC9179063.

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