

Five cadaveric heads were dissected using 10 surgical approaches per head. Stepwise dissections focused on the actual areas of brainstem surface that were exposed through each approach and an analysis of the structures found, as well as which safe entry zones were accessible via each of the 10 surgical windows. RESULTS Thirteen safe entry zones have been reported and validated for approaching lesions in the brainstem, including the anterior mesencephalic zone, lateral mesencephalic sulcus, intercollicular region, peritrigeminal zone, supratrigeminal zone, lateral pontine zone, supracollicularzone, infracollicularzone, median sulcus of the fourth ventricle, anterolateral and posterior median sulci of the medulla, olivary zone, and lateral medullary zone. A discussion of the approaches, anatomy, and limitations of these entry zones is included. CONCLUSIONS A detailed understanding of the anatomy, area of exposure, and safe entry zones for each major approach allows for improved surgical planning and dissemination of the techniques required to successfully resect intrinsic brainstem lesions ¹⁾

¹⁾

Cavalcanti DD, Preul MC, Kalani MY, Spetzler RF. Microsurgical anatomy of safe entry zones to the brainstem. J Neurosurg. 2016 May;124(5):1359-76. doi: 10.3171/2015.4.JNS141945. Epub 2015 Oct 9. PMID: 26452114.

From:

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

Permanent link:

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

Last update: **2024/06/07 02:49**

