

ABSTRACT

Background: Superior Cerebellar Artery (SCA) arises just caudal to the bifurcation of basilar artery. The artery may be exposed in various neurosurgical procedures pertaining to the basilar apex, cerebellopontine angle, clivus etc. With the recent advances in neuroradiology and microvascular surgeries, the knowledge of the anatomical variations becomes very important for the neurosurgeons to perform the operations safely and successfully. Aim of current study was to study the morphometry and anatomical variations of the proximal segment of SCA (i.e. from its origin to its first bifurcation). Methods: 150 SCAs were studied by gross dissection of 75 formalin embalmed brains obtained from the department of anatomy Mysore medical college and MVJ medical college over a period of 5 years. Results: Variations like duplication in the origin was seen in 23.3%, triplication in 2% of SCAs, and abnormal origin from Posterior Cerebellar Artery (PCA) in 25.3% were noted. Other variations like tortuous course & fenestration of SCA were found. The distance from the origin of SCA to PCA ranged between 0.7-4.5 mm. The length from SCA origin to its bifurcation ranged from 6-23 mm. Outer diameter of SCA trunk at its origin varied from 1.2-2.8 mm. The outer diameter of the Basilar Artery (BA) at the basilar apex ranged between 3.2-6 mm. Conclusion: The presence of variations can alter the plan of surgical and radiological procedures. The knowledge of such variations and anomalies along with potential clinical manifestations is of paramount importance primarily for neurosurgeons and neuroradiologists.