Fifty-five adult patients underwent MR imaging of the brain. Four neuroradiologists evaluated the studies for delineation of the lateral tentorial sinus (LTS)LTS and its branches. Presence of arachnoid granulation and dominance of the venous drainage also were reported.

An LTS was detected in 104 of 110 lobes. The LTS in each lobe was classified as type I (candelabra) in 30 (28.8%), type II (independent veins) in 22 (21.1%), and type III (venous lakes) in 37 (35.5%); in 15 (14.4%) of the lobes, the LTS was indeterminate. LTS branches were inconsistently detected, with the exception of the vein of Labbé (VL). Five of eight branches were seen in approximately half of the cases. The VL was identified in 94 (85.4%) lobes. Among these, 53 (56.4%) were draining into the LTS and 22 (23.4%) into the transverse sinus; in 19 (20.2%) cases, the terminal portion was not visualized. The right transverse sinus was dominant in 19 (34.5%) patients and the left in 18 (32.7%); codomination was present in 18 (32.7%) cases. At least one arachnoid granulation was seen in the transverse sinus in 27 (49.1%) patients.

In many instances, the LTS and VL drainage patterns were well delineated on routine MR images. For selected cases, this information may be crucial during lateral skull base surgery to avoid venous infarct [1].

1)
Miabi Z, Midia R, Rohrer SE, Hoeffner EG, Vandorpe R, Berk CM, Midia M. Delineation of lateral tentorial sinus with contrast-enhanced MR imaging and its surgical implications. AJNR Am J Neuroradiol. 2004 Aug;25(7):1181-8. PubMed PMID: 15313706.