## **Tentorial sinus**



Tentorial sinuses are constant venous channels that have been divided into medial and lateral groups  $\frac{1}{2}$   $\frac{2}{3}$ .

These sinuses are located on each half of the tentorium. The medial tentorial sinuses are responsible for the venous drainage of the superior cerebellar surface. The medial tentorial sinuses empty into the straight sinus and transverse sinus confluence. The lateral tentorial sinuses are formed by convergence of the veins draining the basal and lateral surface of the temporal and occipital lobes

A study of Shibao et al., included 126 patients treated via the anterior transpetrosal approach (ATPA). The bridging vein (BV) and the tentorial sinus (TenS) located in the operative fields were analyzed. Furthermore, in the preoperative evaluation, the cross-sectional shapes of the intradural vein and the interdural sinus were analyzed by Curved Planar Reformation (CPR), and the flattening rate was calculated. Flattening rate = (a-b)/a = 1-b/a (a: long radius, b: short radius).

Seventeen BVs and 18 TenS were identified. The bridging site was divided into two groups: tentorial and middle fossa. The middle fossa group was divided into three subgroups: cavernous sinus, middle fossa dural sinus, and middle fossa dural adherence. Five isolated TenS were sacrificed and no venous complications were observed. The mean flattening rate was 0.13 in the intradural vein and 0.51 in the interdural sinus, respectively (P = 0.0003).

They showed classification of the BV, and preservation of the BV and TenS during the ATPA. Furthermore, they found that the interdural sinus was significantly flatter than the intradural veins. Measuring the flattening rate by CPR may be useful to identify BVs preoperatively <sup>4)</sup>.

The tentorial sinus of cadaver cerebellar tentoria were examined under a surgical microscope. The tentorial sinuses were classified into four groups: Group I, in which the sinus received venous blood from the cerebral hemisphere; Group II, in which the sinus drains the cerebellum; Groups III, in which the sinus originates in the tentorium itself; and Group IV, in which the sinus originates from a vein bridging to the tentorial free edge. The tentorial sinuses of Groups I and II were frequently located in the posterior portion of the tentorium. The sinuses of Group I were short and most frequently present in the lateral portion of the tentorium. The tentorial sinuses of Group II, which were usually large and drained into the dural sinuses near the torcular, were separated into five subtypes according to the draining veins and direction of termination. The tentorial sinuses of Groups III and IV were located near the tentorial free edge or the straight sinus. The draining patterns of the tentorial sinuses and their draining veins (so-called "bridging veins") were present in most cases. Knowledge of this anatomy can benefit the neurosurgeon carrying out repair near or on the cerebellar tentorium <sup>5)</sup>.

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