

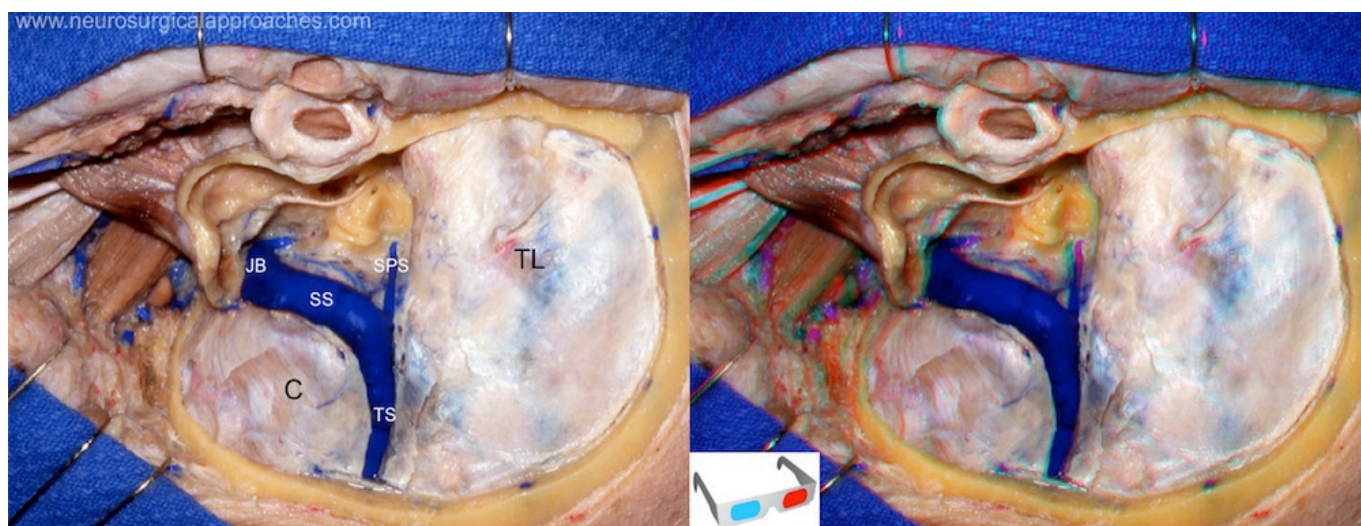
Sigmoid sinus

The sigmoid sinuses, also known as the pars sigmoid, are **venous sinuses** within the skull that receive blood from posterior dural venous sinus veins.

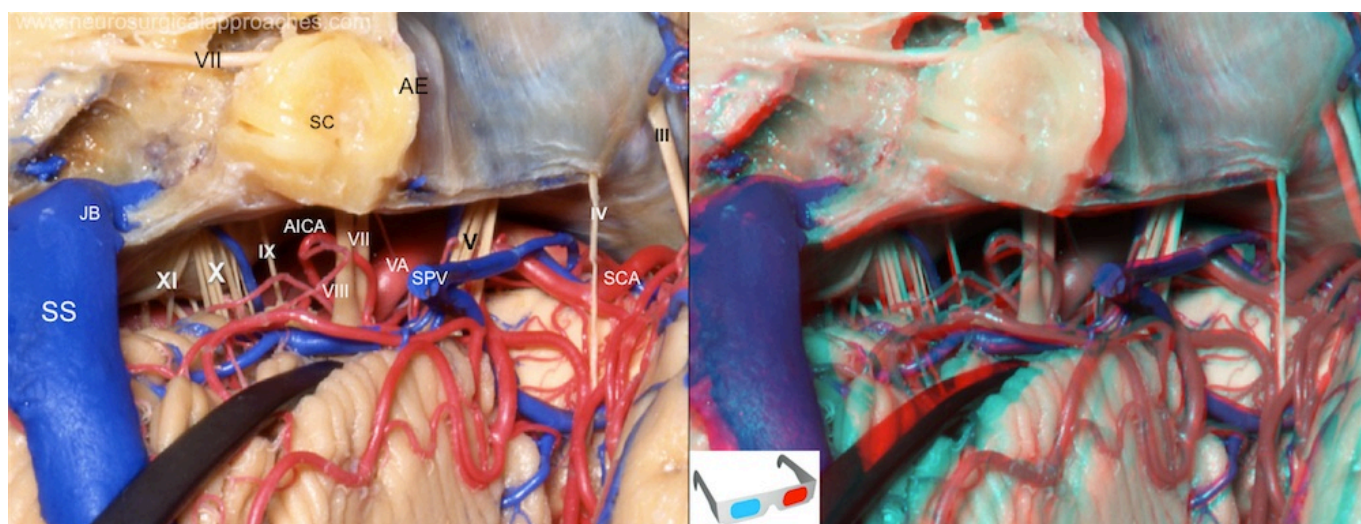
It is a dural venous sinus situated within the dura mater. The sigmoid sinus receives blood from the **transverse sinuses**, which track the posterior wall of the cranial cavity, travels inferiorly along the parietal bone, temporal bone and occipital bone, and converges with the inferior petrosal sinuses to form the internal jugular vein.

Each sigmoid sinus begins beneath the temporal bone and follows a tortuous course to the **jugular foramen**, at which point the sinus becomes continuous with the internal jugular vein.

Along its course, the sigmoid sinus also receives blood from the cerebral veins, cerebellar veins, diploic veins, and emissary veins.



In the combined supra and infratentorial presigmoid approach a temporooccipital craniotomy is performed and the transverse sinus, the superior petrosal sinus and the sigmoid sinus are exposed. C: **cerebellum**; JB: **jugular bulb**; SPS: **superior petrosal sinus**; SS: **sigmoid sinus**; TL: **temporal lobe**; TS: **transverse sinus**.



AE: **arcuate eminence**; AICA: **anterior inferior cerebellar artery**; JB: **jugular bulb**; SC: **semicircular canals**;

SCA: [superior cerebellar artery](#); SPV: [superior petrosal vein](#); SS: [sigmoid sinus](#); VA: [vertebral artery](#).

Closure of the sigmoid sinus may either be planned or as part of an unintentional outcome of transpetrosal surgical procedure ¹⁾.

A study was planned to investigate the cross-sectional areas of the sigmoid sinus in three levels to compare the right-left sides and the probable relationship among the levels in fetuses to further delineate the developmental factors on [jugular foramen](#) asymmetry. The cross-sectional measurements of sigmoid sinus lumen were done on 3 levels which are described as A1 level; sinodural angle, A2 level; the midpoint between the sinodural angle and endocranial orifice and A3 level as the entrance (endo-cranial orifice) of the jugular foramen. There is a strong positive correlation between left (L) A1 and L A2 and also the same for L A1 and right (R) A2. These strong and positive correlations are all valid between L A2-L A3, L A2-R A2, L A2-R A3, L A3-R A3, R A1-R A2 ²⁾.

¹⁾

Zanoletti E, Martini A, Emanuelli E, et al. Lateral approaches to the skull base. Acta Otorhinolaryngol Ital. 2012;32:281-287

²⁾

Özalp H, Aktekin M, Hamzaoglu V, Vayisoğlu Y, Karataş MA, Karşıyaka D, Uzmansel D, Bozdoğan Arpacı R, Cayan F, Eti CM, Kanık A, Baskan FC, Aladağ ZC, Ertaş E, Dağtekin A, Avcı E, Bağdatoğlu C, Ümit Talas D. The Comparison of the Right and Left Sigmoid Sinus Cross-Sectional Areas in Fetal Period and the Factors Affecting the Venous Dominance. J Int Adv Otol. 2019 Dec;15(3):409-414. doi: 10.5152/iao.2019.5876. PubMed PMID: 31846921.

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