

Traditionally, the [dural venous sinuses](#) have been described only in the [cranium](#). However, anecdotally, during various neurosurgical intradural procedures in the lumbosacral spine, Iwanaga et al., noticed an intradural collection of blood. With no prior studies on this in the extant medical literature, the following anatomical investigation seemed warranted.

Twenty fresh frozen adult cadavers were used for the study. The [dural sac](#) was exposed and removed. A 30-gauge needle was inserted into the dura mater while not traversing the full thickness of the dura mater. Once the needle was positioned halfway into the thickness of the dura mater, injection of black ink was attempted. Cross-sections of the dural sac were performed and the sections stained using hematoxylin and eosin and examined under a light microscope.

Spinal venous sinuses were identified between the fifth lumbar fifth and first sacral vertebral levels in 14 (70%) specimens. Transdural vessels were found through the thickness of the dural sac along its entire circumference but the spinal venous sinus was only identified in the posterior region of the dural sac in the lumbosacral region (L3 to S1).

This study identified a dural venous sinus located in the dorsal lumbosacral region and near the midline. Iwanaga et al., suggest this structure be called the “lumbosacral venous sinus”. Although the function of such a sinus is speculative, knowledge of its presence might benefit those interpreting imaging of this region, especially with regional pathology such as dural arteriovenous fistulas <sup>1)</sup>.

<sup>1)</sup>

Iwanaga J, Alonso F, Akobo S, Turgut M, Yurttas C, Loukas M, Reina MA, Oskouian RJ, Tubbs RS. The Lumbosacral Dural Venous Sinus: A New Discovery with Potential Clinical Applications. World Neurosurg. 2017 Feb 8. pii: S1878-8750(17)30142-0. doi: 10.1016/j.wneu.2017.01.116. [Epub ahead of print] PubMed PMID: 28189870.

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