The purpose of this study is to compare the angiographic and clinical characteristics of spinal epidural arteriovenous fistulas (SEAVFs) and spinal dural arteriovenous fistulas (SDAVFs) of the thoracolumbar spine.

A total of 168 cases diagnosed as spinal dural or extradural arteriovenous fistulas of the thoracolumbar spine were collected from 31 centers. Angiography and clinical findings, including symptoms, sex, and history of spinal surgery/trauma, were retrospectively reviewed. Angiographic images were evaluated, with a special interest in spinal levels, feeders, shunt points, a shunted epidural pouch and its location, and drainage pattern, by 6 readers to reach a consensus.

The consensus diagnoses by the 6 readers were SDAVFs in 108 cases, SEAVFs in 59 cases, and paravertebral arteriovenous fistulas in 1 case. Twenty-nine of 59 cases (49%) of SEAVFs were incorrectly diagnosed as SDAVFs at the individual centers. The thoracic spine was involved in SDAVFs (87%) more often than SEAVFs (17%). Both types of arteriovenous fistulas were predominant in men (82% and 73%) and frequently showed progressive myelopathy (97% and 92%). A history of spinal injury/surgery was more frequently found in SEAVFs (36%) than in SDAVFs (12%; P=0.001). The shunt points of SDAVFs were medial to the medial interpedicle line in 77%, suggesting that SDAVFs commonly shunt to the bridging vein. All SEAVFs formed an epidural shunted pouch, which was frequently located in the ventral epidural space (88%) and drained into the perimedullary vein (75%), the paravertebral veins (10%), or both (15%).

SDAVFs and SEAVFs showed similar symptoms and male predominance. SDAVFs frequently involve the thoracic spine and shunt into the bridging vein. SEAVFs frequently involve the lumbar spine and form a shunted pouch in the ventral epidural space draining into the perimedullary vein ¹⁾.

1)

Kiyosue H, Matsumaru Y, Niimi Y, Takai K, Ishiguro T, Hiramatsu M, Tatebayashi K, Takagi T, Yoshimura S; JSNET Spinal AV Shunts Study Group. Angiographic and Clinical Characteristics of Thoracolumbar Spinal Epidural and Dural Arteriovenous Fistulas. Stroke. 2017 Dec;48(12):3215-3222. doi: 10.1161/STROKEAHA.117.019131. Epub 2017 Nov 7. PubMed PMID: 29114089; PubMed Central PMCID: PMC5704665.

From: https://neurosurgerywiki.com/wiki/ - **Neurosurgery Wiki**

Permanent link: https://neurosurgerywiki.com/wiki/doku.php?id=thoracolumbar_dural_arteriovenous_fistula



