

<div><div>AANS/CNS Joint Cerebrovascular Annual Meeting</div><div>January 22–23, 2018 Los Angeles, CA</div></div>		<div>Epidural Spinal Arteriovenous Fistula in Patients with Neural Tube Defects</div> <div>Enrico Giordan MD; Giuseppe Lanzino MD; Waleed Brinjikji BS</div>			
<div><div>Introduction</div><div>Neural tube defects, such as tethered cord, intradural lipoma or myelomeningocele may coexist with spinal arteriovenous malformations. The coexistence of these two rare entities is suggestive of a causal relationship between the two which may lead to further understanding of their pathogenesis. We present a series of six patients with epidural spinal arteriovenous fistula associated with neural tube defects.</div><div>Methods</div><div>We retrieved cases of spinal vascular malformations associated with neural tube defects seen at our Institution. The clinical presentation, MRI/MRA and angiographic imaging, treatment outcomes, and long-term neurological outcomes were analyzed. Descriptive statistical analyses are reported.</div><div>Learning Objectives</div><div>By the conclusion of this session, participants should be able to: 1)be aware that the rare concurrence of neural tube defects with spinal vascular malformations its not just speculative, 2) keep that in consideration when evaluating a patient with a neural tube defect and myelopathy 3)paid attention in identifying the anterior spinal artery arising from a low lying artery such as the lateral sacral artery .</div></div>		<div><div>Results</div><div>Six patients with an epidural arteriovenous fistula and neural tube defects were included in this study. Mean age at presentation was 42 years and the most common presenting symptoms were lower extremity weakness followed by sensory disturbances and bladder bowel dysfunction. In the majority of cases (5/6) the fistulae were located at the sacral level. All cases were fed by the lateral sacral artery (6/6). Four patients had prior spine surgery but the fistula was located in the operative bed in two cases. All fistulae were extradural with secondary intradural venous drainage. Five patients underwent transarterial embolization with Onyx and one patient suffered a treatment related complication.</div><div>Conclusions</div><div>It is conceivable that there is a pathophysiological link between neural tube defects and development of spinal vascular malformations. Delayed neurological deterioration or high conus signal in a patient with neural tube defect should raise the possibility of such an association.</div><div>[Default Poster]</div></div>			
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