

## **OCCULT CERVICAL SPINAL DURAL ARTERIOVENOUS FISTULA MASQUERADING AS ACUTE SPINAL CORD ISCHEMIA**

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### **Abstract:**

Acute presentation of upper and lower extremity motor weakness is commonly attributed to intracerebral ischemic infarct upon initial examination. For those that exhibit acute onset of bilateral weakness, it is important to expand the differential diagnosis to include spinal cord ischemic involvement. One cause of ischemic lesions is spinal dural arteriovenous (AV) fistulas which are generally found in the thoraco-lumbar region. They present with progressive paraplegia or quadriplegia due to changes in the spinal venous pressure and eventual myelopathy. We present a 60 year old gentleman with bilateral upper extremity weakness and right lower extremity weakness preceded by upper back and neck pain. Initial studies included both Magnetic resonance imaging (MRI) of the brain and also the cervical spine that demonstrated abnormal signal intensity within the anterior cervical cord from C3-C7 levels concerning for spinal cord infarct. In our case there were no flow voids to suggest dilated perimedullary vessels that usually prompt further diagnostic evaluation through a spinal angiogram. However, given the clinical suspicion, a spinal angiogram was obtained that demonstrated a cervical dural AV fistula supplied by a dural branch vessel originating from the left vertebral artery. We will highlight the importance of recognizing the clinical presentation of spinal dural AV fistulas; the usual findings on imaging, the value of considering further diagnostic tests if clinical suspicion is high, and provide an overview of the spinal dural AV treatment.