

SPINAL DURAL ARTERIOVENOUS FISTULA (AVF) CAUSING COMPLETE PARALYSIS OF LOWER LIMB: A RARE PRESENTATION OF COMPLETE TREATMENT OF TUBERCULOUS SPONDYLITIS WITH NEUROLOGICAL DEFICIT

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Introduction: Arteriovenous fistula (AVF) is an abnormal communication between an artery and a vein. This communication usually congenital and can occur at any point in the vascular system in our body. Spinal involvement of arteriovenous fistula (spinal dural AVF) has been described in the literature, but it is uncommon. A case with complete paralysis secondary to spinal dural AVF after completed treatment of tuberculous spondylitis is even rare. This case study describes the presentation of a patient with spinal dural AVF post tuberculous spondylitis which is a very rare condition.

Discussion: A 46-year-old gentleman was initially presented to us with back pain and progressive bilateral lower limb weakness in 2016. He had been diagnosed with tuberculous spondylitis of T6 - T10 with paravertebral collection. His sputum acid fast bacilli and whole spine magnetic resonance imaging strongly suggested a tuberculous infection. Patient opted for conservative management and was started on anti-tuberculous medication. He completed the anti-tuberculous medication for 12 months and compliance on his regular follow up. However, 4 years later he complained of worsening lower limb weakness and was unable to ambulate. He was then admitted and further investigations were done to rule out recurrence of tuberculous spondylitis. Urgent whole spine magnetic resonance imaging was done and the results showed evidence of spinal dural AVF causing venous congestion and long segment cord ischemia from T4 until conus medullaris. Subsequently we referred him to the neurosurgical team for further management regarding to spinal dural arteriovenous fistula. Spinal dural arteriovenous fistula embolization was done and he was discharged with follow up.

Conclusion: A spinal dural AVF post tuberculous spondylitis is an extremely rare presentation which needs to be aware of. This case suggests and proves that patient with tuberculous spondylitis can also have spinal dural AVF as one of its complications.