Spinal cord ischemia

Despite the improved understanding of spinal cord anatomy and spinal cord ischemia pathophysiology, the rate of debilitating postoperative paraparesis or paraplegia is still not negligible after procedures for thoracic or thoracoabdominal aortic lesion. Single studies have demonstrated the role of different treatment modalities to prevent or treat spinal cord ischemia. A multimodal approach, however, is advocated by most authors. Even after the employment of endovascular techniques become routine, the rate of spinal cord ischemia after treatment of thoracoabdominal aortic pathology remained unchanged over time. Spinal cord ischemia is often treatable by different means that concur to improve indirect spinal perfusion through collateral circulation; it should, therefore, be managed promptly and aggressively due to its potential reversibility. Ongoing technical improvements of non-invasive diagnostic tools may allow a better preoperative assessment of the spinal vascular network and a better planning of both open and endovascular thoracic or thoracoabdominal repair [1].

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Melissano G, Bertoglio L, Mascia D, Rinaldi E, Del Carro U, Nardelli P, Chiesa R. Spinal cord ischemia is multifactorial: what is the best protocol? J Cardiovasc Surg (Torino). 2016 Apr;57(2):191-201. Epub 2016 Jan 15. PubMed PMID: 26731537.