Vertebral arteriovenous fistulas (VAVF) are uncommon, high-flow communications between a vertebral artery and surrounding venous plexus that occur spontaneously or secondary to trauma. A 57-year-old female presented with a multi-day history of rapidly progressive numbness and weakness in the left C5-C6 dermatomes. Her physical exam findings and subsequent electrophysiological testing were suggestive of a brachial radiculoplexopathy. Noninvasive imaging demonstrated venous congestion with multilevel compromise of the left-sided cervical foramina, and subsequent vertebral angiography confirmed a VAVF, which was treated with trapping of the involved VA segment. Her numbness and weakness progressively improved with concurrent involution of the dilated veins. An exceptional case of VAVF manifesting as a brachial radiculoplexopathy is presented. VAVF are rare, though they may be considered as a potential underlying cause in patients with comparable symptoms. Endovascular embolization has been demonstrated as a safe and efficacious method in treating VAVFs, though multiple patient-specific factors must be contemplated.

Disclosures A. Larson: None. L. Rinaldo: None. C. Arnold Fiebelkorn: None. N. Young: None. G. Lanzino: None.