

## Introduction

### Vascular fistulas of the brain and spinal cord

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Vascular fistulas of the brain and spinal cord are among the most challenging conditions that neurosurgeons encounter. The evolution of venous drainage that causes dynamic changes in pathophysiology accounts for their highly variable natural history. Furthermore, the variety of treatment options (observation, surgical disconnection and/or resection, radiosurgery, embolization, or various combinations thereof) adds to the complexity of their care. In combination with the relative rarity of these lesions, such factors have precluded systematic study and definitive statements about their management.

This issue of *Neurosurgical Focus* aims to fill the knowledge gap about many aspects of CNS vascular fistulas, such as the role of noninvasive methods (for example, MRI) in their detection, the association between cerebral dural arteriovenous fistulas and aneurysms, and the durability of Onyx embolization, among others.

The first set of articles explores the topic of spinal dural arteriovenous fistulas. The nonspecific nature of their symptoms and the prevalent unawareness of this entity often lead to delayed diagnosis, which frequently precludes full recovery. The next batch of articles concentrates on carotid cavernous fistulas (CCFs). Advances in endovascular devices and techniques, such as those described in these reports, have permitted successful treatment of CCFs in most cases. The last group addresses several other facets of CNS vascular fistulas and includes the article featured in this month's podcast, "Curative Onyx Embolization of Tentorial Dural Arteriovenous Fistulas." Much remains unknown about these fascinating lesions, and we hope that the articles selected for this issue inspire further study.

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#### Disclosure

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