V

Vasospasm

Elliot J. Roth

Northwestern University, Feinberg School of Medicine, Physical Medicine and Rehabilitation, Chicago, IL, USA

Definition

Cerebral vasospasm is the sudden acute narrowing of cerebral blood vessels that can occur 3–4 days after the onset of a subarachnoid hemorrhage (SAH) stroke resulting from a rupture of a cerebral aneurysm.

vasospasm is seen in 40–70% of SAH patients on cerebral angiogram, but symptoms occur in about 20–30%. It can cause confusion, reduced consciousness, and ultimately coma and death. When it is less severe, neurological recovery occurs as the arterial narrowing resolves. Treatment involves administration of selected medications and fluids to reduce the vasospasm.

Cross-References

- [Subarachnoid Hemorrhage](#)
- [Vasculitis](#)

Current Knowledge

By causing reduced cerebral blood flow to the affected area, it causes cerebral ischemia, and consequently vasospasm is a significant cause of morbidity and mortality following SAH. Arterial

References and Readings

- Dietrich, H. H., & Dacey, R. G. (2000). Molecular keys to the problems of cerebral vasospasm. *Neurosurgery*, *46*, 517–530.
- Weir, B. (1995). The pathophysiology of cerebral vasospasm. *British Journal of Neurosurgery*, *9*, 375–390.