

# Vein of Galen Malformation Treatment

## Hydrocephalus

[Hydrocephalus](#) associated with [Vein of Galen Malformation](#) is obstructive, due to varix. Although admonitions about shunting were common due to fear of precipitating a [hemorrhage](#) when hydrocephalus is present the patient needs a [shunt](#).

## Vein of Galen malformations

Pediatric patients are often in poor medical condition, limiting the efficacy of operative treatment. Treatment options for these include embolization of the main feeding arteries. The prognosis is poor. Those presenting with hydrocephalus from aqueductal obstruction often do so at the end of the first year of life. Neurosurgical excision may be considered here, and the prognosis is better.

Repeated embolization while monitoring the venous drainage is employed.

## Parenchymal AVM with enlarged VOG

The AVM is treated by the same methods as other AVMs (embolization, resection, or radiosurgery).

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There have been many multidisciplinary approaches to the treatment of [vein of Galen](#) malformations.

These lesions can present with high-output congestive heart failure, seizures, failure to thrive, hydrocephalus, and brain hemorrhage. High surgical morbidity and mortality, exceeding 90% in some series, has led to the development of endovascular techniques that more safely and effectively treat these lesions <sup>1) 2) 3) 4)</sup>.

## References

<sup>1)</sup>

Amacher AL, Shillito J. The syndromes and surgical treatment of aneurysms of the great vein of Galen. J Neurosurg. 1973;39:89-98.

<sup>2)</sup>

Hoffman HJ, Chuang S, Hendrick EB, Humphreys RP. Aneurysms of the vein of Galen. Experience at The Hospital for Sick Children, Toronto. J Neurosurg. 1982;57:316-322.

<sup>3)</sup>

Johnston IH, Whittle IR, Besser M, Morgan MK. Vein of Galen malformation: diagnosis and management. Neurosurgery. 1987;20:747-758.

<sup>4)</sup>

Norman MG, Becker LE. Cerebral damage in neonates resulting from arteriovenous malformation of the vein of Galen. J Neurol Neurosurg Psychiatry. 1974;37:252-258.

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