

Vein of Galen Malformation Clinical Features

Vein of Galen malformations may carry life-threatening and catastrophic sequelae in children. Their clinical presentations are different variables between cardiac and cerebral syndromes.

Newborns tend to present with congestive heart failure in the first few weeks of life (due to high blood flow)¹⁾ and a cranial bruit. Hydrocephalus may result from obstruction of the Sylvian aqueduct by the enlarged Vein of Galen Malformation, or it may be caused by the increased venous pressure (which can also produce prominence of the scalp veins²⁾). Parenchymatous AVMs are usually diagnosed later in life due to neurological manifestations,³⁾ including focal neurologic deficit and hemorrhage.

There may be a possible relationship between the Galenic angioarchitecture and the clinical presentation.

Significant stenosis (>70%) of the draining sinus is a significant factor for Vein of Galen malformation aneurysmal enlargement and the occurrence of hydrocephalus. Probably, venous outflow impairment decreases the incidence of high-output heart failure and increases the incidence of hydrocephalus⁴⁾.

References

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