Intraventricular varix causing hemorrhage

Case report

José M. Roda, M.D., José Bencosme, M.D., Alberto Isla, M.D., and Martín G. Blázquez, M.D.

Neurosurgery Service, Hospital “La Paz”, Autonomous University of Madrid School of Medicine, Madrid, Spain

A case of a cerebrovascular varix located in the right lateral ventricle is reported. The patient suffered intraventricular and subarachnoid hemorrhages. The intraventricular varix was coagulated and excised.

KEY WORDS □9 venous malformation □9 varix □9 subarachnoid hemorrhage □9 lateral ventricle

A varix is a very rare cerebrovascular malformation composed of a solitary vein. In the central nervous system this can occasionally reach a considerable size and may produce signs and symptoms due to compression of adjacent structures. McCormick, et al., found only two cases among 346 cerebrovascular malformations.

Case Report

This 51-year-old woman suddenly experienced occipital headache and vomiting, and was admitted to our hospital. On admission she was alert, and neurological examination revealed neck stiffness without other abnormality. A computerized tomography scan showed blood within the basal cisterns and the third, fourth, and right lateral ventricles. Four-vessel angiography was performed. The arterial phase of the right internal carotid angiogram was normal; however, the venous phase disclosed a venous dilatation, 6 to 7 mm in diameter, at the junction of the thalamostriate and internal cerebral veins (Fig. 1).

The patient underwent surgery through an anterior transcaldosal approach with exposure of the right lateral ventricle. A venous varix lying on the floor of the ventricle was coagulated and excised (Fig. 2). The surgical specimen could not be histologically studied because of the coagulation of the material. She did well in the immediate postoperative period, but on the second day she developed a complete right hemiplegia, which progressively cleared over the following month.

Control postoperative angiography showed no evidence of the vascular malformation. At the present time she has no neurological deficit.

Discussion

In 1966, McCormick proposed a pathological classification of vascular malformations into five types: 1) telangiectasia; 2) varix; 3) cavernous angioma; 4) arteriovenous malformation; and 5) venous angioma. Recently, he has regrouped them into four categories in

Fig. 1. Right internal carotid angiogram, venous phase, showing a venous varix at the junction of the thalamostriate and internal cerebral veins.
Intraventricular varix causing hemorrhage

which the varices are considered as a variant of venous malformations. Cerebral varices are usually located in the parenchyma or leptomeninges, and are seen at the venous phase of angiography. On microscopic studies, they are enlarged thin-walled veins, with little local disturbance and without calcification. Complications are infrequent, but hemorrhage and thrombosis with hemorrhagic infarction have been described. As far as we are aware, no case of an intraventricular varix causing hemorrhage has been reported. Its presentation with an intraventricular and subarachnoid hemorrhage made an operation mandatory in this case. We would like to emphasize this, because conservative treatment has been generally recommended for this lesion with a favorable prognosis. In the present situation, conservative therapy was not acceptable.

References


Manuscript received June 11, 1987.
Address reprint requests to: José M. Roda, M.D., Servicio de Neurocirugía, Hospital “La Paz,” Paseo de la Castellana 261, 28046 Madrid, Spain.