

DURAL SINUS COMPARTMENT IN DAVF – HOW TO IDENTIFY?

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Dural Sinus Compartment in Dural Arteriovenous Shunts: A New Angioarchitectural Feature Allowing Superselective Transvenous Dural Sinus Occlusion Treatment

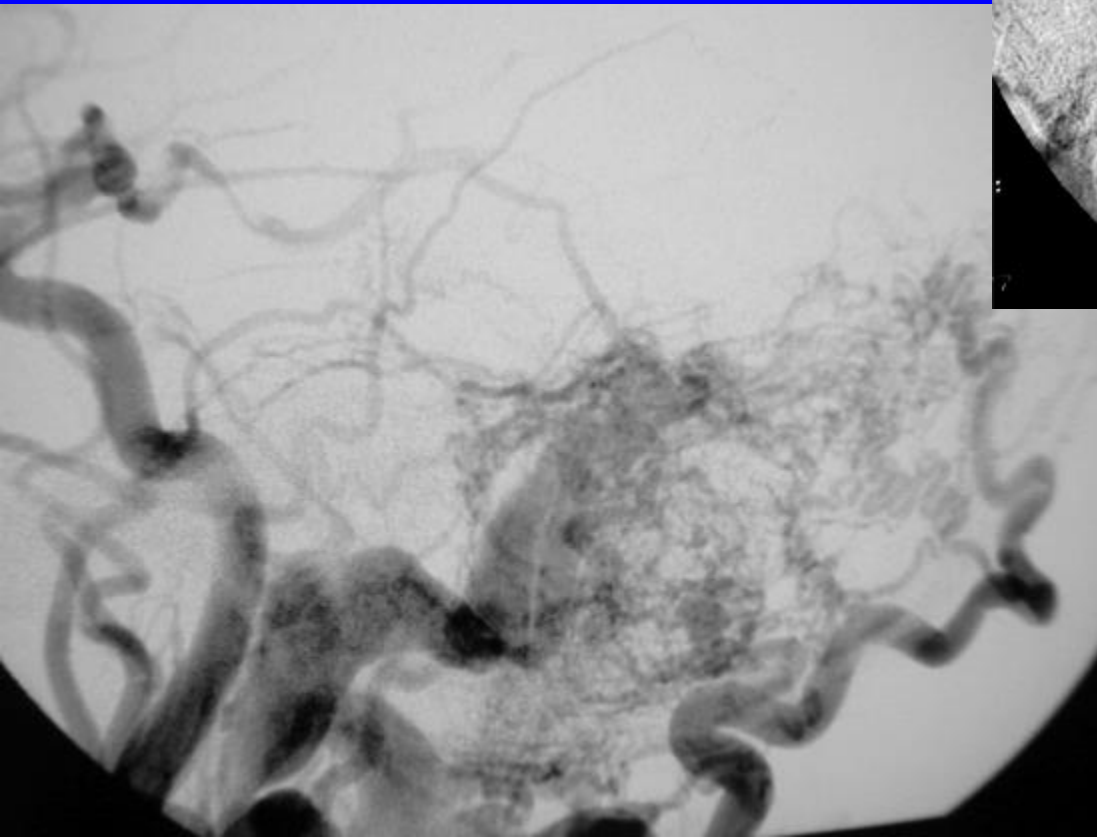
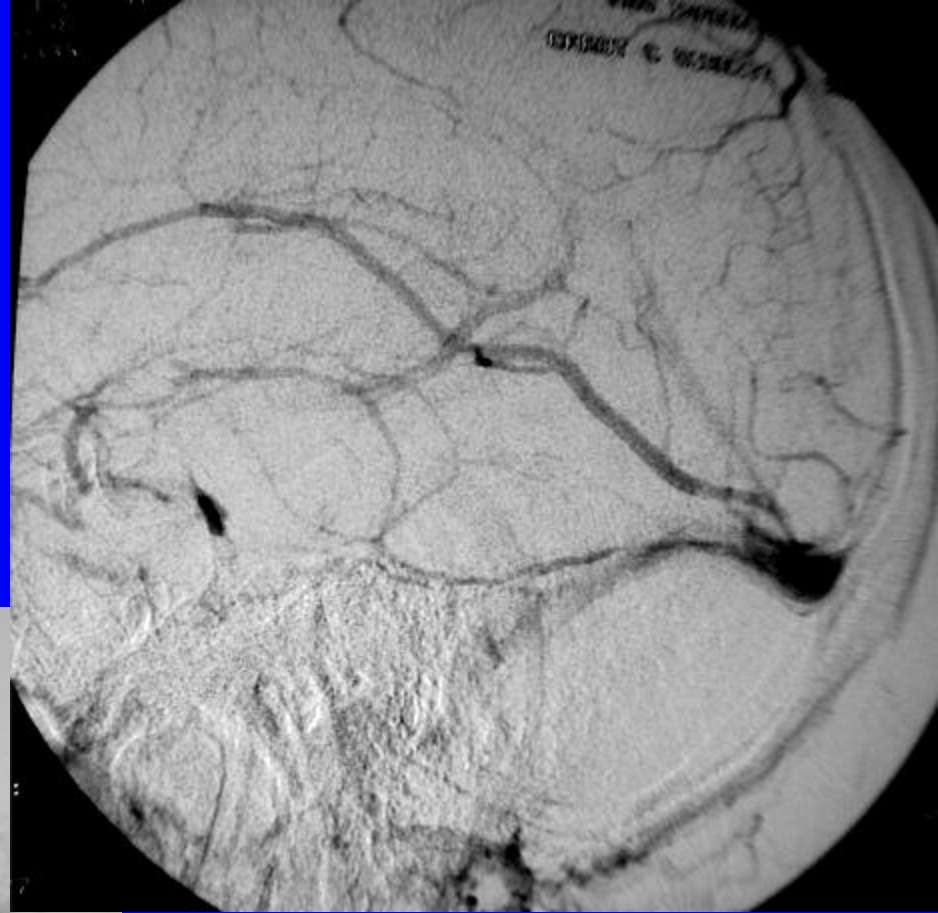
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BACKGROUND AND PURPOSE: The dural sinus occlusion has been shown to be effective in the treatment of some dural arteriovenous shunts (DAVS). No long-term results are available, however, regarding the significance of occlusion of a dural sinus. If the disease will stop or if other events will occur later in the remaining sinuses are not well known yet. Careful analyses of our cases led us to discover that, in some instances, the shunt involves only a single portion or compartment of a sinus. In this report, we describe our results in the treatment of these lesions: occluding only the involved compartment while preserving patency of the remainder of the sinus and the angiographic signals, thus allowing diagnosis of the presence of a compartment.

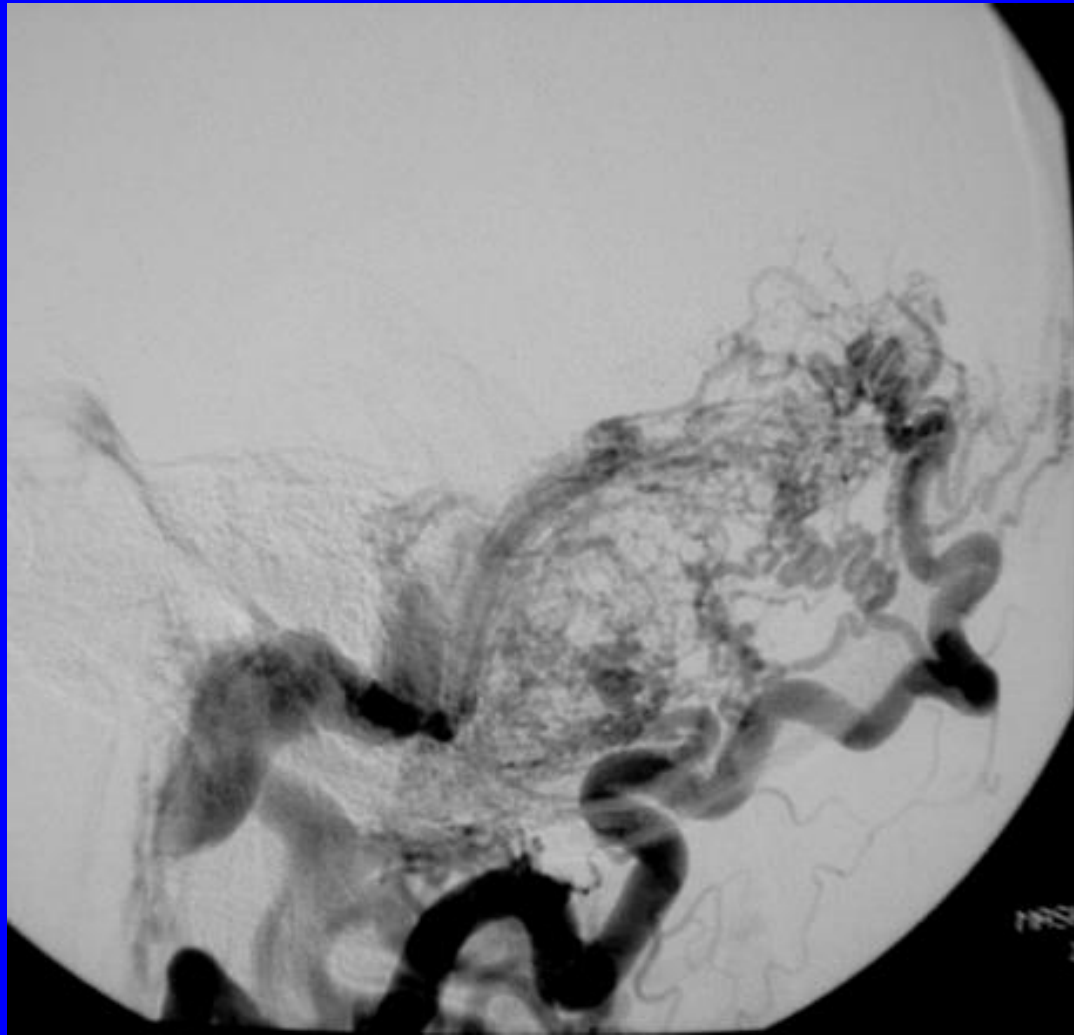
METHODS AND RESULTS: From 1996 to October 2002, we found 12 cases of DAVS (among 40 new cases of DAVS) with two types of compartments—one inside the sinus, which we call “septation” (nine cases), and the other outside the sinus, which we call “accessory sinus” (three cases). It was possible to occlude completely the lesion superselectively in nine cases. In two cases, it was necessary to occlude the entire sinus secondarily, and in one case the sinus was occluded because was impossible to catheterize the septation. Two cases with recanalization on the control were treated by additional arterial and arterial and venous approach.

CONCLUSION: It is very important to diagnose the presence of a compartment in dural arteriovenous shunts during the diagnostic angiography. In most cases, it allows curative treatment of the lesion by occluding only the compartment while preserving patency of the remainder of the sinus.

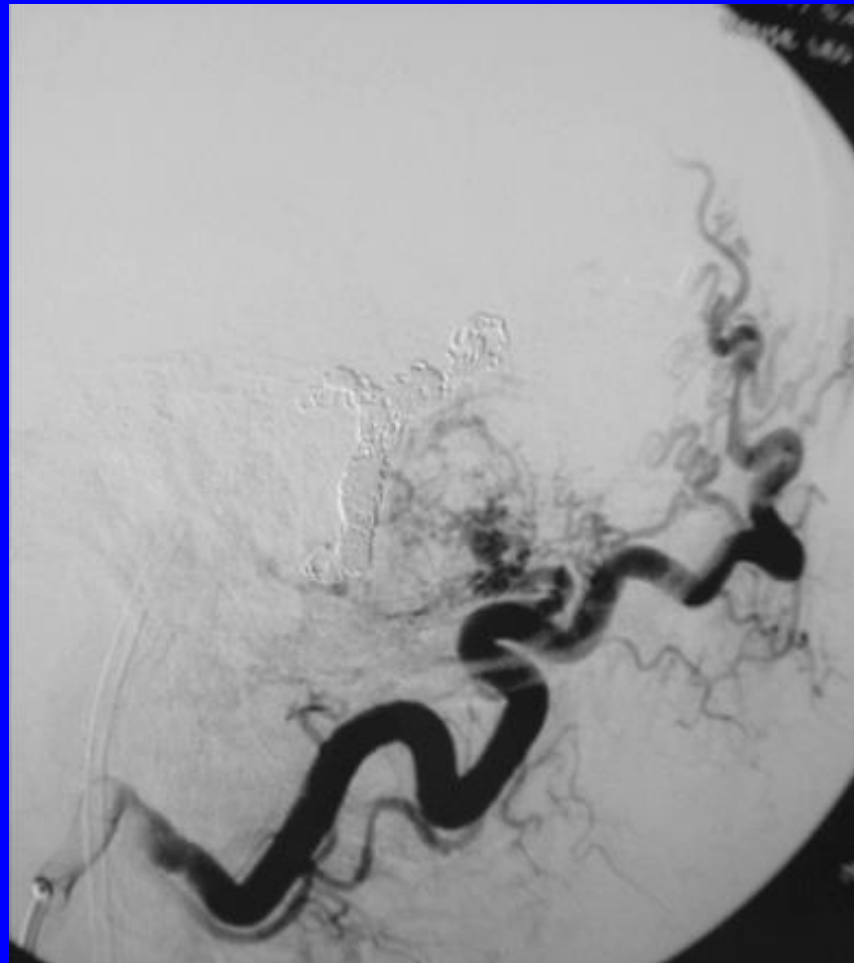
RICA angiogram – arterial and venous Phase.



Early arterial phase of occipital artery angiogram – partial filling of the sigmoid sinus, inferring the presence of a compartment



Selective occlusion of the compartment



Patency of the sigmoid sinus



Patency of the sigmoid sinus

