

On-line Table 1: MRI classification of cavernomas as proposed by Mottolese et al⁴

Lesion Type	Morphologic Characteristics (CT/MR)	Signal Characteristics	Comments
Type IA	Large spheric lesion with sharp and regular margins with or without apparent encapsulation; sessile bell clapper-like inner structure of distinct attenuation or signal visible in most cases; perilesional edema may be present	Acute stage: acute hematoma-like signal of the main part (T1 isointense and T2 hypointense); subacute stage: T1 hyperintense, variable on T2, T2-hypointense thin peripheral rim of hemosiderin The same as type IA	Cavernomas with recent overt hemorrhage, usually presenting with acute symptoms (cephalgia, seizure, focal neurologic deficits); most are lobar supratentorial
Type IB	The same as type IA, without inner or outer visible cavernomas		Cavernomas with overt recent hemorrhage and acute symptoms; most are brain stem or deep supratentorial; hemorrhagic metastases; may be of similar appearance but usually occur in children with a history of malignancy Corresponds to Zabramski type I lesion; variable clinical presentation
Type IIA	Small (1–2.5 cm) lesion with ≥ 1 centimetric cores	Cores: T1 hyperintense, T2/T2* hypointense peripheral parenchymal rim of hemosiderin	Asymptomatic or associated with epilepsy; frequent in adults and uncommon in children; corresponds to Zabramski type II lesion
Type IIB	Small (1–2.5 cm) lesion with reticulated core	Core made of T1 and T2-hyperintense points, surrounded by a T2-hypointense rim	May be asymptomatic even when very large
Type IIIA	Large lesion with macroscopic cysts and huge calcifications	Heterogeneous signal with cysts of water-like signal and T2- and T2*- hypointense areas reflecting hemosiderin parenchymal staining or huge calcifications	
Type IIIB	Purely cystic (uni- or multiloculated)	Content of waterlike signal on T1 and T2; no T2 hypointense rim; subtle or evident T2* hypointense rim	May be misleading with cystic tumors if T2*; GE sequence is not performed
Type IIIC	Large solid, round, or ovoid lesion; regular, well-demarcated boundaries more visible on MRI than on CT; peripheral edema may be present	Heterogeneous inner signal on T1 and T2; peripheral T2* hypointense rim	May be misleading with a high-grade tumor on CT or MRI if T2*; GE sequence is not performed
Type IV	Size ≥ 1 cm	Not visible on T1; homogeneous T2; hypointense; best seen on T2* GE	Mainly encountered in multiple and/or familial forms; most are asymptomatic; corresponds to Zabramski type IV lesions

On-line Table 2: Cross-tabulation illustrating initial clinical symptoms of all children, excluding 2 patients with an isolated headache

	No ICP	ICP
No seizures		
No FND	7	11
FND	9	11
Seizures		
No FND	13	11
FND	5	1

Note:—FND indicates focal neurologic deficits; ICP, signs of a raised intracranial pressure.

On-line Table 3: Cross-tabulation comparing short-term and long-term hemorrhage rates among cavernoma types^a

Type	I		II		III		IV	
	Breslow	Log-Rank	Breslow	Log-Rank	Breslow	Log-Rank	Breslow	Log-Rank
II	1.210 (.271)	1.338 (.247)						
III	24.142 (<.001) ^b	36.096 (<.001) ^b	2.260 (.133)	5.374 (.020) ^b				
IV	84.843 (<.001) ^b	106.462 (<.001) ^b	20.222 (<.001) ^b	35.191 (<.001) ^b	5.923 (.015) ^b	6.017 (.014) ^b		
V	0.167 (.683)	1.295 (.255)	0.146 (.703)	0.182 (.670)	7.591 (.006) ^b	4.049 (.044) ^b	26.999 (<.001) ^b	10.565 (.001) ^b

^a χ^2 values and respective *P* values (in parentheses) for the Breslow test (Generalized Wilcoxon) and the log-rank test (Mantel-Cox).

^b Significant *P* value.