

Data Collection Sheet for Brain AVM (2016)

MRN:		Date of Birth:	
Last Name:		Gender: <input type="checkbox"/> Male <input type="checkbox"/> Female	
First Name:			
Date of presentation:	Clinical Presentation: <input type="checkbox"/> Incidental <input type="checkbox"/> Hemorrhage <input type="checkbox"/> Seizure <input type="checkbox"/> Focal neurological deficit <input type="checkbox"/> Headache <input type="checkbox"/> Other	Handedness: <input type="checkbox"/> Right <input type="checkbox"/> Left <input type="checkbox"/> Ambidextrous	Imaging source and date:
AVM CHARACTERISTICS:	AVM Size:	AVM Location: <input type="checkbox"/> Cortical <input type="checkbox"/> Frontal <input type="checkbox"/> Temporal <input type="checkbox"/> Parietal <input type="checkbox"/> Occipital <input type="checkbox"/> Subcortical <input type="checkbox"/> Basal ganglia <input type="checkbox"/> Internal capsule <input type="checkbox"/> Corpus callosum	
	Lesion side <input type="checkbox"/> Right <input type="checkbox"/> Left <input type="checkbox"/> Midline	<input type="checkbox"/> Ventricular <input type="checkbox"/> Intraventricular <input type="checkbox"/> Cerebellar hemisphere <input type="checkbox"/> Vermian (paramedian) <input type="checkbox"/> Deep cerebellar nuclei <input type="checkbox"/> Brainstem	
	AVM border with adjacent brain <input type="checkbox"/> Compact <input type="checkbox"/> Diffuse	Eloquence: <input type="checkbox"/> Not eloquent <input type="checkbox"/> Sensorimotor <input type="checkbox"/> Visual cortex <input type="checkbox"/> Language cortex <input type="checkbox"/> Thalamus / hypothalamus / basal ganglia <input type="checkbox"/> Internal capsule <input type="checkbox"/> Cerebellar peduncle <input type="checkbox"/> Deep cerebellar nuclei <input type="checkbox"/> Brainstem <input type="checkbox"/> Other eloquence	
AVM HEMORRHAGE:	Evidence of NEW hemorrhage: <input type="checkbox"/> Yes <input type="checkbox"/> No	Evidence of OLD hemorrhage: <input type="checkbox"/> Yes <input type="checkbox"/> No	
	Age of new hemorrhage	Age of old hemorrhage	
	Is new hemorrhage symptomatic? <input type="checkbox"/> Yes <input type="checkbox"/> No	Was old hemorrhage symptomatic? <input type="checkbox"/> Yes <input type="checkbox"/> No	
	Hemorrhage location: <input type="checkbox"/> Ventricular <input type="checkbox"/> Parenchymal <input type="checkbox"/> Subarachnoid	Hemorrhage location: <input type="checkbox"/> Ventricular <input type="checkbox"/> Parenchymal <input type="checkbox"/> Subarachnoid	
	Hemorrhage Size:	Hemorrhage Size:	

VENOUS DRAINAGE:	Venous Drainage <input type="checkbox"/> Superficial <input type="checkbox"/> Deep <input type="checkbox"/> Both	No. drains leaving nidus:	Venous stenosis / occlusions (%)
	Periventricular drainage: <input type="checkbox"/> Yes <input type="checkbox"/> No	No. veins reaching sinus:	Sinus thrombosis / occlusions (%)
		Venous ectasia: <input type="checkbox"/> Yes <input type="checkbox"/> No	Venous reflux: <input type="checkbox"/> Yes <input type="checkbox"/> No
ARTERIAL SUPPLY:	Feeding arteries: <input type="checkbox"/> ACA cortical branches <input type="checkbox"/> ACA penetrators <input type="checkbox"/> MCA cortical branches <input type="checkbox"/> MCA penetrators <input type="checkbox"/> PCA cortical branches <input type="checkbox"/> PCA penetrators <input type="checkbox"/> Other ICA branches <input type="checkbox"/> ICA penetrators <input type="checkbox"/> ECA branches	<input type="checkbox"/> Anterior choroidal a. <input type="checkbox"/> Posterior choroidal a. <input type="checkbox"/> Superior cerebellar a. <input type="checkbox"/> AICA <input type="checkbox"/> PICA <input type="checkbox"/> VA branches <input type="checkbox"/> VA penetrators <input type="checkbox"/> Basilar artery penetrators <input type="checkbox"/> Other arteries	
	No. of arterial aneurysms:	Location of aneurysms: <input type="checkbox"/> Flow-related <input type="checkbox"/> Not flow-related <input type="checkbox"/> Nidal <input type="checkbox"/> Proximal <input type="checkbox"/> Distal	Aneurysms with hemorrhagic history? <input type="checkbox"/> Yes <input type="checkbox"/> No
			Arterial aneurysms hemorrhagic (date):
OTHERS:	Number of vessels to be embolized:	Pial-to-pial collateralization <input type="checkbox"/> Same territory <input type="checkbox"/> Between territories <input type="checkbox"/> None	Intravascular pressure measurements
	Moya-moya –type changes <input type="checkbox"/> Yes <input type="checkbox"/> No		

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Reference: "Reporting Terminology For Brain Arteriovenous Malformation Clinical And Radiographic Features For Use In Clinical Trials". Stroke 32.6 (2001): 1430-1442. Web.

Describing AVMs:

1. General

- a. Clinical presentation
 - i. Incidental
 - ii. Hemorrhage
 - iii. Seizure
 - iv. Focal neurological deficit
 - v. Headache
 - vi. Other
- b. Date of presentation
- c. Imaging source and date

2. Location and Size

- a. Lesion side
 - i. Right
 - ii. Left
 - iii. Midline
- b. Handedness
 - i. Right
 - ii. Left
 - iii. Ambidextrous
- c. AVM size
- d. AVM location
 - i. Cortical
 - ii. Subcortical
 - iii. Ventricular
 - iv. Corpus callosum
 - v. Frontal
 - vi. Temporal
 - vii. Parietal
 - viii. Occipital
 - ix. Basal ganglia
 - x. Internal capsule
 - xi. Intraventricular
 - xii. Cerebellar hemisphere
 - xiii. Vermian (paramedian)
 - xiv. Deep cerebellar nuclei
 - xv. Brainstem
- e. Eloquentness
 - i. Not eloquent
 - ii. Sensorimotor cortex
 - iii. Visual cortex
 - iv. Language cortex
 - v. Thalamus / hypothalamus / basal ganglia
 - vi. Internal capsule
 - vii. Cerebellar peduncle
 - viii. Deep cerebellar nuclei
 - ix. Brainstem
 - x. Other eloquent
- f. AVM border with adjacent brain
 - i. Compact
 - ii. Diffuse
- g. AVM hemorrhage
 - i. Evidence of new hemorrhage (y/n)
 - ii. Age of new hemorrhage
 - iii. Is new hemorrhage symptomatic
 - iv. Evidence of old hemorrhage (y/n)
 - v. Age of old hemorrhage
 - vi. Was old hemorrhage symptomatic?
- h. Hemorrhage location
 - i. Ventricular
 - ii. Parenchymal
 - iii. Subarachnoid
- i. Hemorrhage size

3. Venous drainage

- a. Superficial vs deep venous drainage
 - i. Both superficial and deep
 - ii. Superficial only
 - iii. Deep only
- b. Periventricular drainage (y/n)
- c. Number of draining veins leaving nidus
- d. Number of veins reaching sinus
- e. Venous stenosis / occlusion (%)
- f. Venous ectasia (y/n)
- g. Venous reflux (y/n)
- h. Sinus thrombosis / occlusions (%)

4. Arterial supply

- a. Feeding arteries
 - i. Anterior choroidal a.
 - ii. ACA cortical branches
 - iii. ACA penetrators
 - iv. MCA cortical branches
 - v. MCA penetrators
 - vi. Other ICA branches
 - vii. ICA penetrators
 - viii. PCA cortical branches
 - ix. PCA penetrators
 - x. Posterior choroidal
 - xi. Superior cerebellar
 - xii. AICA
 - xiii. PICA
 - xiv. ECA branches
 - xv. Basilar artery penetrators
 - xvi. VA branches
 - xvii. VA penetrators
 - xviii. Other arteries
- b. Arterial aneurysms
 - i. Number of aneurysms
 - ii. Location
 1. Flow-related
 2. Not flow-related
 3. Nidal
 4. Proximal
 5. Distal
 - iii. Arterial aneurysms hemorrhagic history (y/n)
 - iv. Arterial aneurysms hemorrhagic (date)
- c. Number of vessels to be embolized
- d. Moya-moya –type changes (y/n)
- e. Pial-to-pial collateralization
 - i. Same territory
 - ii. Between territories
 - iii. None
- f. Intravascular pressure measurements