

**On-line Table 1: Patient clinical presentation and angiographic findings**

Patient No.	Age (yr)/Sex	Clinical Presentation	Location	Arterial Supply		Venous Drainage		Cortical Veins	Varix
				ICA	ECA	Pattern			
1	60/F	Chemosis, proptosis, retro-orbital pain, tinnitus	R greater sphenoid wing	ILT, MHT, Recur meningeal branch of OphA	MMA anterior branch, AMA, foramen rotundum artery	R SpBS, SMCV, R CS, bilateral IPS, R SOV	No	Yes	
2	78/M	Temporal lobe hematoma	L greater sphenoid wing	ILT, Recur meningeal branch of OphA	MMA anterior branch	L SpBS, SMCV, deep Sylvian vein, vein of Labbe, cortical vein	Yes	Yes	
3	37/F	Bruit, proptosis, tinnitus, retro-orbital pain	L greater sphenoid wing	None	MMA petrosal branch	L SpBS, L CS, L SOV	No	Yes	
4	54/M	Chemosis, deterioration of vision, proptosis	L greater sphenoid wing	None	MMA petrosal branch	L SpBS, L CS, L SOV	No	Yes	
5	62/M	Homonymous hemianopsia	L greater sphenoid wing	ILT, MHT, Recur meningeal branch of OphA	MMA anterior branch, AMA, foramen rotundum artery	L laterocavernous sinus, basal vein of Rosenthal, vein of Galen; SMCV, Sylvian vein, vein of Trolard, SSS	Yes	Yes	
6	29/F	Recurrent chemosis, headache, proptosis, retro-orbital pain	L greater sphenoid wing	Recur meningeal branch of OphA	MMA anterior branch, middle temporal artery, anterior auricular artery	L SpBS, L CS, L SOV; SMCV, cortical vein	Yes	Yes	
7	77/F	Incidental lesion; history of MVA	L lesser sphenoid wing	None	MMA anterior branch	L lesser wing sinus, meningeal vein, SSS	No	No	
8	60/F	Bruit, chemosis, proptosis, ptosis	R lesser sphenoid wing	ILT, Recur meningeal branch of OphA	MMA anterior branch	R lesser wing sinus, R CS, bilateral IPS, R SOV	No	No	
9	48/M	Bruit, tinnitus; history of MVA	L lesser sphenoid wing	None	MMA anterior branch	L lesser wing sinus, pterygoid plexus, L deep facial vein	No	No	
10	46/M	Chemosis, proptosis; history of MVA	R lesser sphenoid wing	ILT	MMA anterior branch	R lesser wing sinus, R CS, R SOV	No	No	
11	66/M	Deterioration of vision	R lesser sphenoid wing	ILT, Recur meningeal branch of OphA	MMA anterior branch, AMA, foramen rotundum artery	R SMCV, vein of Labbe, R transverse sinus; vein of Trolard, SSS	Yes	Yes	

**Note:**—AMA indicates accessory meningeal artery; CS, cavernous sinus; ILT, inferolateral trunk; IPS, inferior petrosal sinus; L, left; MHT, meningohypophyseal trunk; MVA, motor vehicle crash; OphA, ophthalmic artery; R, right; Recur, recurrent; SpBS, sphenobasal sinus; SSS, superior sagittal sinus.

**On-line Table 2: Treatment and anatomic clinical outcomes**

Patient No.	Endovascular Treatment	Surgical Treatment	Year of Treatment	Complications	Angiographic Results	Angiographic Follow-Up	Clinical Outcome
1	TVE from the IPS, Matrix coils and Onyx 18; TAE from the R MMA, Onyx 18	None	2010	Asymptomatic stretched coil retention	Anatomic cure	No follow-up	Cure, 6 months follow-up
2	TAE from the L MMA; Onyx 18	None	2008	None	Anatomic cure	No recurrence at 3 months	Cure, 9 months follow-up
3	TAE from the L MMA; GDC, Onyx 34, Onyx 18	None	2007	None	Anatomic cure	No recurrence at 5 months	Cure, 8 months follow-up
4	TAE from the L MMA; Onyx 34	None	2006	None	Anatomic cure	No recurrence at 21 months	Cure, 21 months follow-up
5	TVE from the vein of Galen, GDCs; TAE from the L MMA, 33% n-BCA	None	2000	None	Anatomic cure	No follow-up	No follow-up
6	TAE from the L MMA, fiber coils; TAE from the L middle temporal and anterior auricular, 33% n-BCA	Pterional craniotomy; disconnection of cortical vein and resection of the lesion	1993	None	Anatomic cure, intraoperative angiography	No recurrence at 12 months	Cure, 2 years follow-up
7	TAE from the L MMA; Onyx 18	None	2009	None	Anatomic cure	No follow-up	Cure, 14 months follow-up
8	TVE from the facial vein; pushable coils	None	2001	None	Anatomic cure	No recurrence at 7 years	Cure, 7 years follow-up
9	TAE from the L MMA; 33% n-BCA	None	2000	None	Anatomic cure	No recurrence at 6 years	Cure, 6 years follow-up
10	TAE from the R MMA, microcoils and 33% n-BCA; TVE from the facial vein, microcoils and GDCs	None	1995	None	Anatomic cure	No recurrence at 4 months	Cure, 4 months follow-up
11	TAE from the R ILT, GDCs; TAE from the R MMA, 33% n-BCA	Pterional craniotomy; disconnection of cortical veins, resection of the lesion, and decompression of the optic nerve	1993	None	Anatomic cure, intraoperative angiography	No recurrence at 18 months	Cure, 15 years follow-up

**Note:**—ILT indicates inferolateral trunk; IPS, inferior petrosal sinus; L, left; R, right; TAE, transarterial embolization; TVE, transvenous embolization.