

TABLES

Table 1 – Terminal vessel aneurysms

	Age/ Sex	Aneurysm location	Symptoms	Strategy	Bypass recipient	Recipient territory	Recip- ient territory flow*	Cut flow	Bypass flow**	Graft	Patent postop	F/U	Neurologic outcome
1	42/F	Giant ICA terminus	Regrowth post coiling	Partial trapping	M1 branch	MCA	23	N/A	30	ECA-Vein	yes	3y	Stable preop hemiplegia
2	44/F	Dissecting ICA bifurcation	Acute headache	Partial trapping	M2 branch	MCA	81	28# (100)	95	STA-Vein	yes	1y	No deficit
3	67/F	MCA trifurcation	Regrowth post clipping	Clipping with branch occlusion	M2 branch	Temporal M2 branch	27	N/A	31	ECA-Vein	yes	3.5y	No deficit
4	54/F	Fusiform M1	Regrowth post clipping	Trapping	M2 branch	MCA	50	N/A	50	ECA-Vein	yes	1y	Improved preop hemiparesis
5	42/M	Fusiform M1	Headache	Trapping	M2 branch	MCA	66	54	62	STA	yes	4.5y	No deficit
6	22/F	Giant MCA bifurcation	Incidental	Trapping	M2 branch	MCA	69	N/A	63	ECA-Vein	yes	5y	No deficit
7	37/F	Fusiform M2	Headache	Trapping	M2 branch	Temporal M2 branch	74	64	70	STA	yes	3m	No deficit
8	75/F	Fusiform M3	Headache	Trapping	M3 branch	M3 branch	11	14	11	STA	yes	2m	No deficit
9	47M	Giant MCA bifurcation	Headache	Clipping	M3 branch	Temporal M2 branch	45	31	37	STA	N/A ^s	6m	No deficit

10	77/M	Fusiform PcoA (fetal PCA)	Incidental	Trapping	P2 segment	PCA	33	63	64	STA	yes	1m	Transient hemiparesis
11	54/M	Fusiform VA (PICA segment)	SAH (Grade I)	Trapping	Distal PICA	PICA	24	82	31	OA	yes	1y	No deficit
12	72/F	Fusiform PICA	SAH (Grade 4)	Trapping	Distal PICA	PICA	11	19	14	OA	yes	6m	Improved neuro status; but remains dependent
13	32/F	Fusiform VA (PICA segment)	Regrowth post stenting	Trapping	Distal PICA	PICA	8	62	15	OA	yes	1.5y	No deficit except vocal cord paresis
14	73/M	Fusiform PICA	SAH (Grade 3)	Trapping	Distal PICA	PICA	9	8	13	OA	yes	4m	Improved neuro status; ambulatory
15	48/F	Giant BA terminus	Headache	Partial trapping	SCA	SCA, BA terminus	10	24	12	STA	yes	6m	No deficit

BA – basilar artery; ICA – internal carotid artery; ECA – external carotid artery; MCA – middle cerebral artery; OA- occipital artery; PCA – posterior cerebral artery; PcoA – posterior communicating artery; PICA – posterior inferior cerebellar artery; SCA – superior cerebellar artery; STA – superficial temporal artery. N/A in the cut flow column specifies ‘not available’ in cases where anatomical considerations precluded use of in situ grafts (such as prior surgery or diminutive caliber).

* Recipient territory flow indicates flow in vessel or vessels which require replacement – for the MCA aneurysms, in some cases only one M2 or M3 branch required revascularization, in other cases, the full MCA territory

** Bypass flow following occlusion of the proximal vessel

The STA branch cut flow was 28 cc/min, and the donor was felt to be unsuitable. However, the STA was cut down to its stump which demonstrated an excellent outflow of 100 cc/min, and was utilized for the proximal vein anastomosis.

§ Bypass performed for protection against ischemia during prolonged temporary clipping.

Table 2 – Proximal ICA aneurysms

	Age/ Sex	ICA aneurysm location	Symptoms	BOT result	Strategy	Bypass recipient	Recipient territory flow deficit (%)	Cut flow	Bypass flow**	Graft	Patent postop	F/U	Neurologic outcome
16	73/F	L giant cavernous	Ophthalmo- plegia	Failed SPECT	Trapping	ATA	21 (38%)	55	51	STA	yes	5y	No deficit
17	50/F	R fusiform supraclinoid	Incidental	Failed SPECT	Proximal occlusion	M2 branch	20 (29%)	44	24	STA	yes	2.5y	No deficit
18	55/F	L fusiform supraclinoid	SAH (Grade 3)	None (hypoplastic A1, PCoA origin aneurysmal)	Trapping	M2 branch	70 (93%)	10 [#] (90)	85	STA- Vein	yes	3m	Vasospasm: hemiparesis, aphasia; dependent
19	61/F	L giant cavernous	Ophthalmo plegia	Failed SPECT	Proximal occlusion	ATA	15 (27%)	30	28	STA	yes	2m	No deficit, except impr. ophthalmoplegia
20	74/F	L giant cavernous	Ophthalmo plegia	Failed SPECT	Proximal occlusion	M3 branch	25 (45%)	45	27	STA	yes	2m	No deficit, except impr. ophthalmoplegia
21	58/F	R supraclinoid pseudo- aneurysm	SAH	None (hypoplastic A1 and PcoA)	Clipping	M3 branch	22 (55%)	28	20	STA	N/A ^S	1y	No deficit
22	49/F	R giant paraclinoid	SAH (Grade 4)	None (hypoplastic A1 and PcoA)	Clipping	M3 branch	21 (36%)	N/A	220	ECA- Vein	N/A ^S	6m	Vasospasm: poor neuro status; dependent
23	73/F	R giant supraclinoid	Hemi- anopsia	None (hypoplastic A1, PcoA arising from aneurysm)	Clipping	M3 branch	12 (27%)	25	15	STA	N/A ^S	6m	No deficit, except hemi- anopsia resolving

ATA – anterior temporal artery; ICA – internal carotid artery; ECA – external carotid; PcoA – posterior communicating artery; SPECT – single-photon emission computed tomography; STA – superficial temporal artery;

N/A in the cut flow column specifies ‘not available’ in cases where anatomical considerations precluded use of in situ grafts (such as prior surgery or diminutive caliber).

* Recipient territory flow deficit indicates the reduction in flow measured in the M1 when the ICA is occluded temporarily.

** Bypass flow following occlusion of the ICA

The STA branch cut flow was 10 cc/min, and the donor was felt to be unsuitable. However, the STA was cut down to its stump which demonstrated an excellent outflow of 90 cc/min, and was utilized for the proximal vein anastomosis.

§ Bypass performed for protection against ischemia during prolonged temporary clipping.

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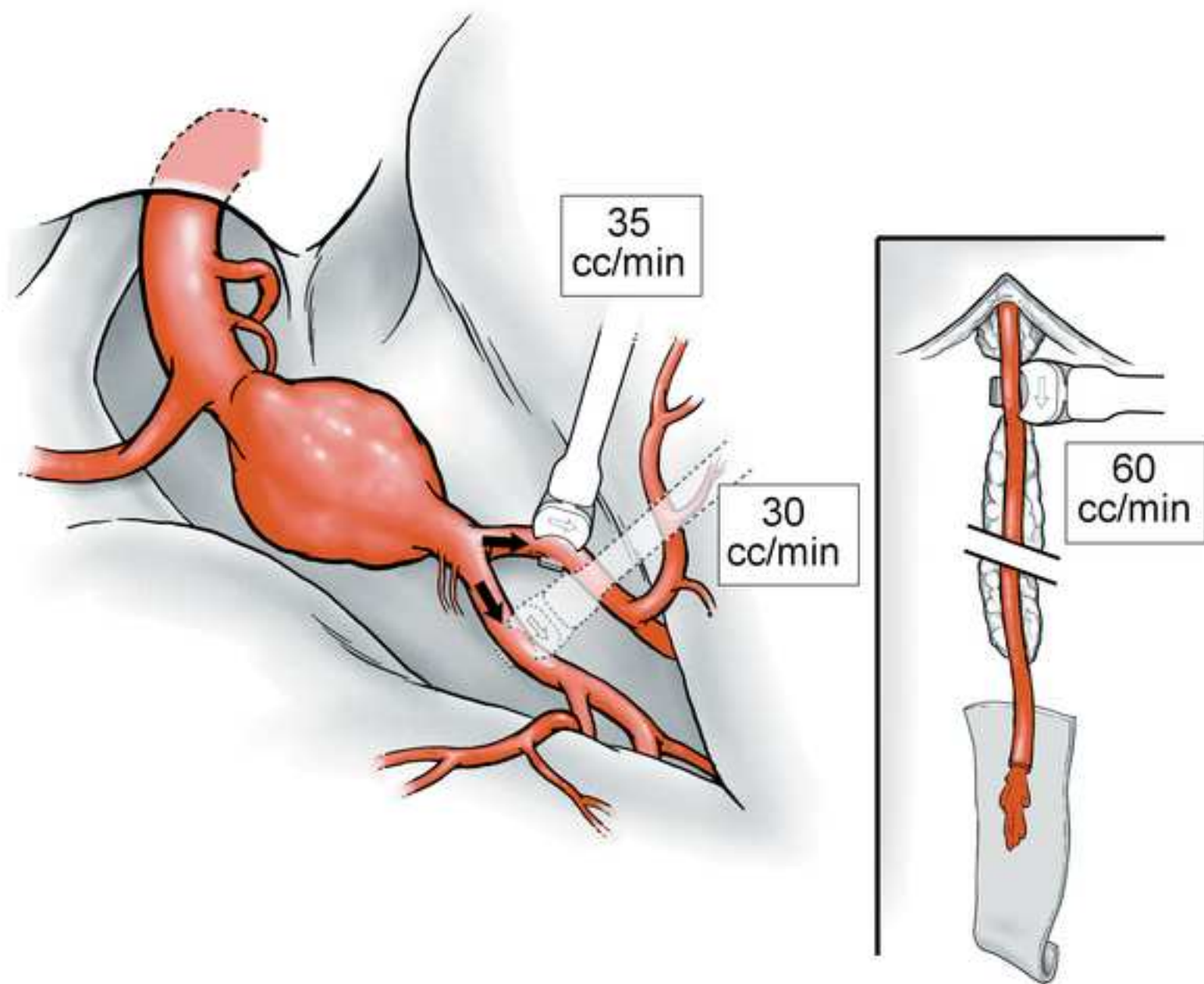


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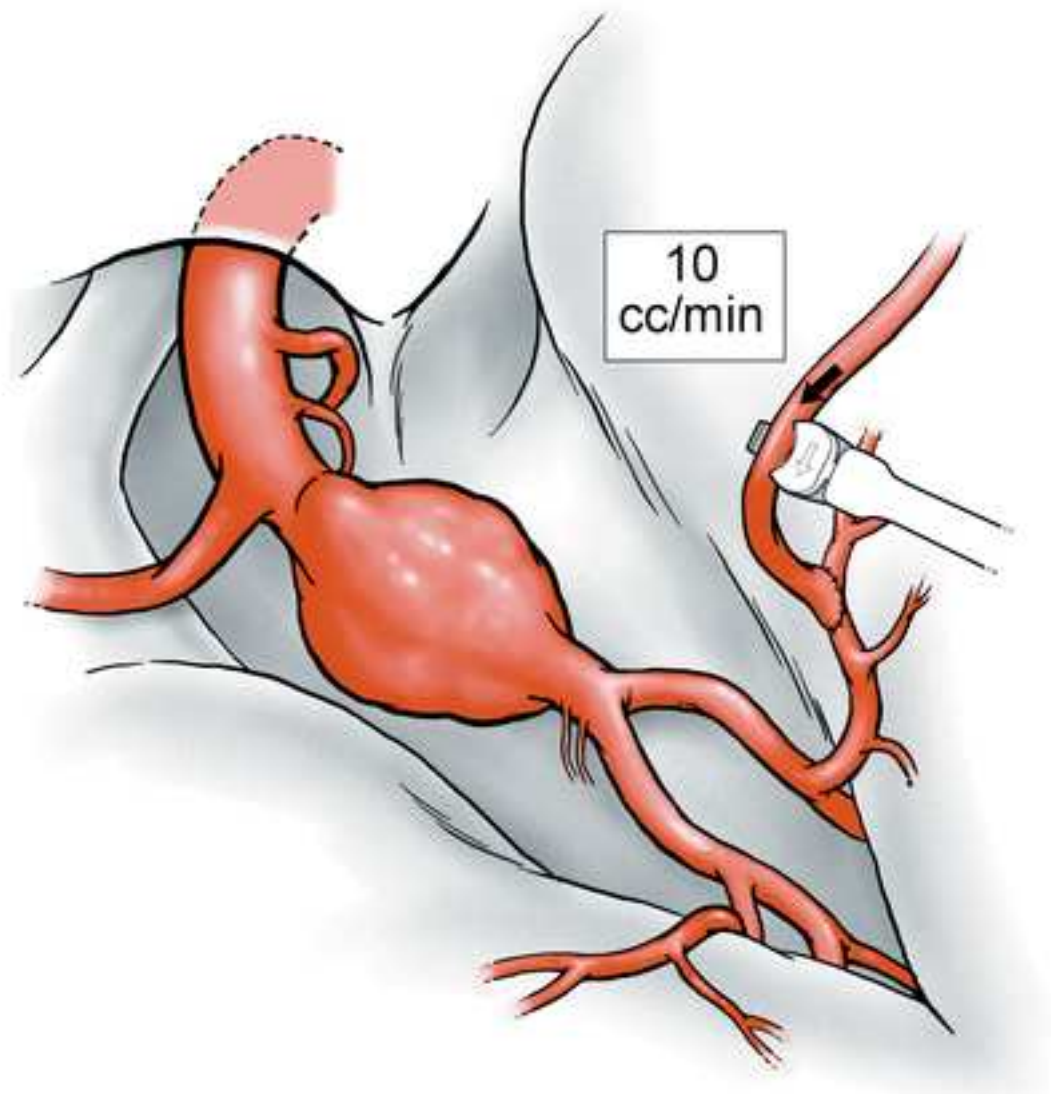


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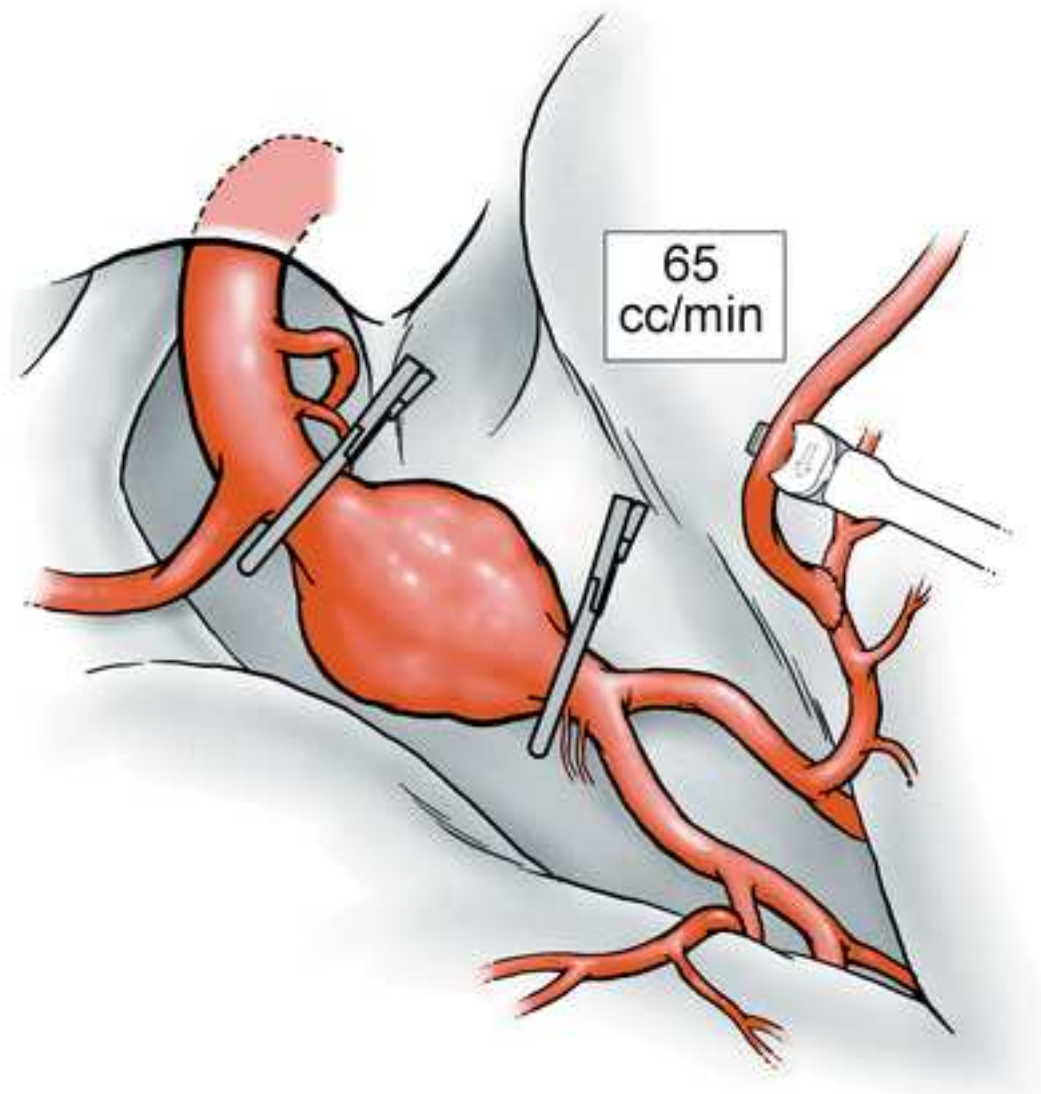


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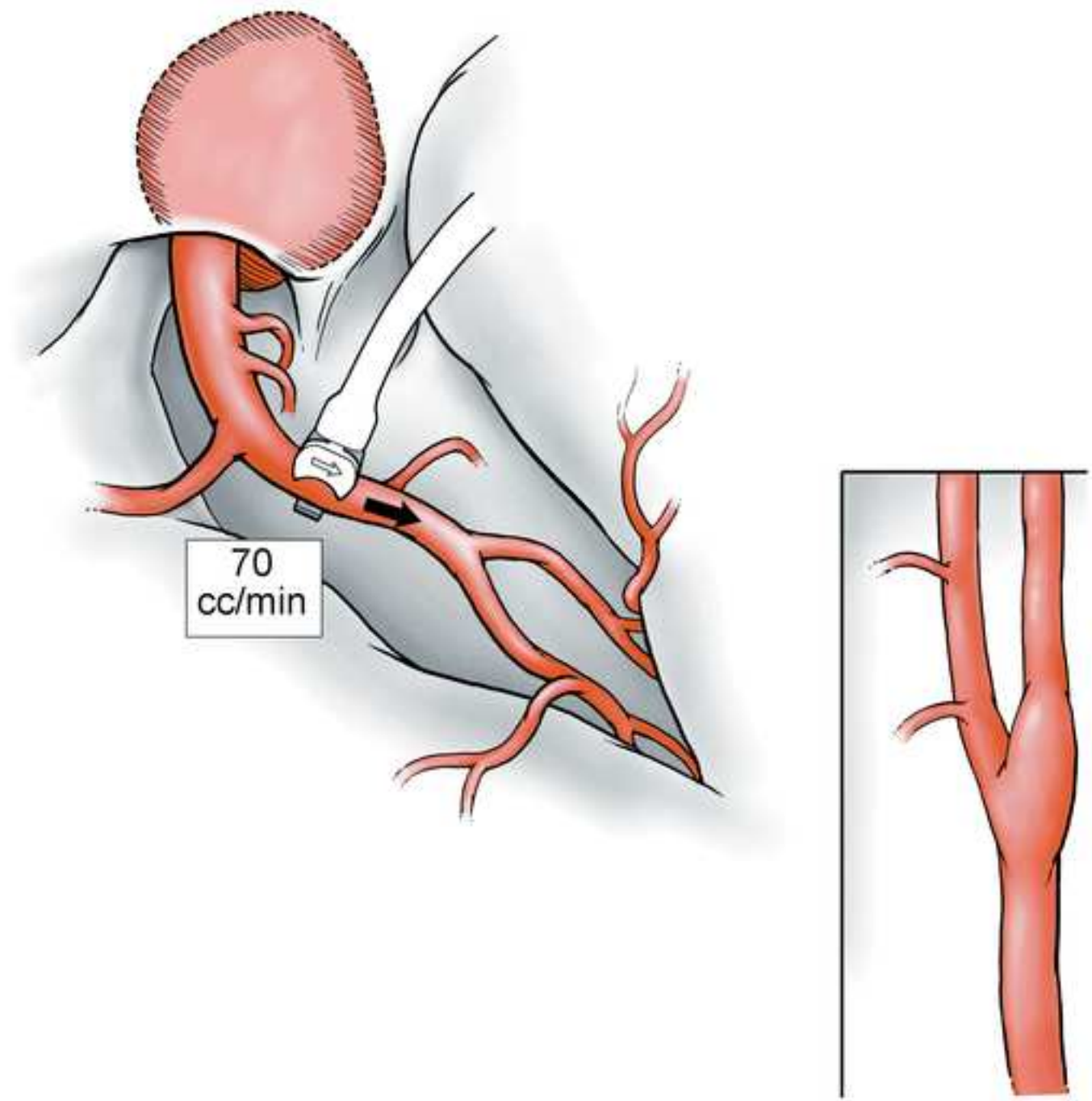


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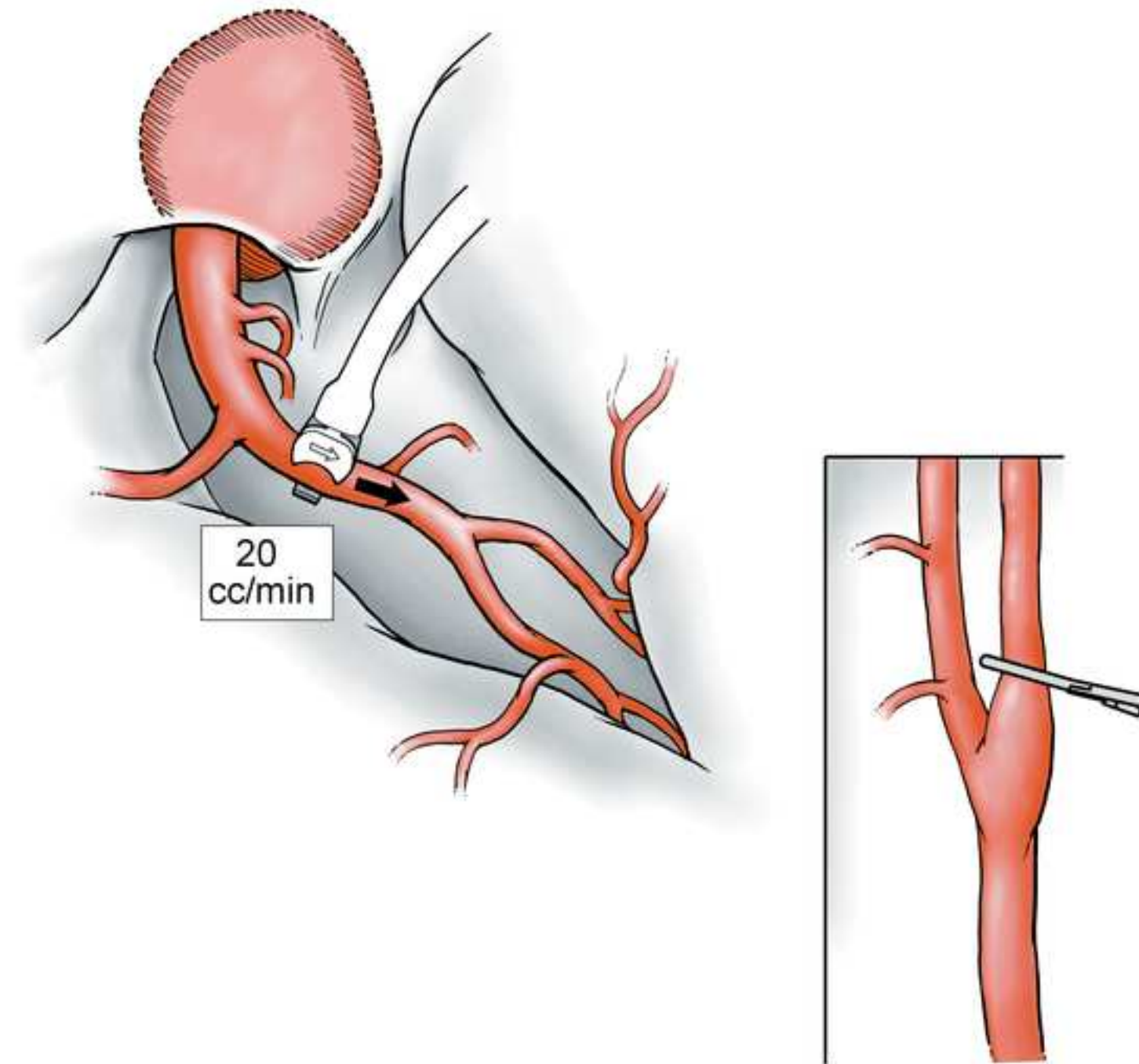


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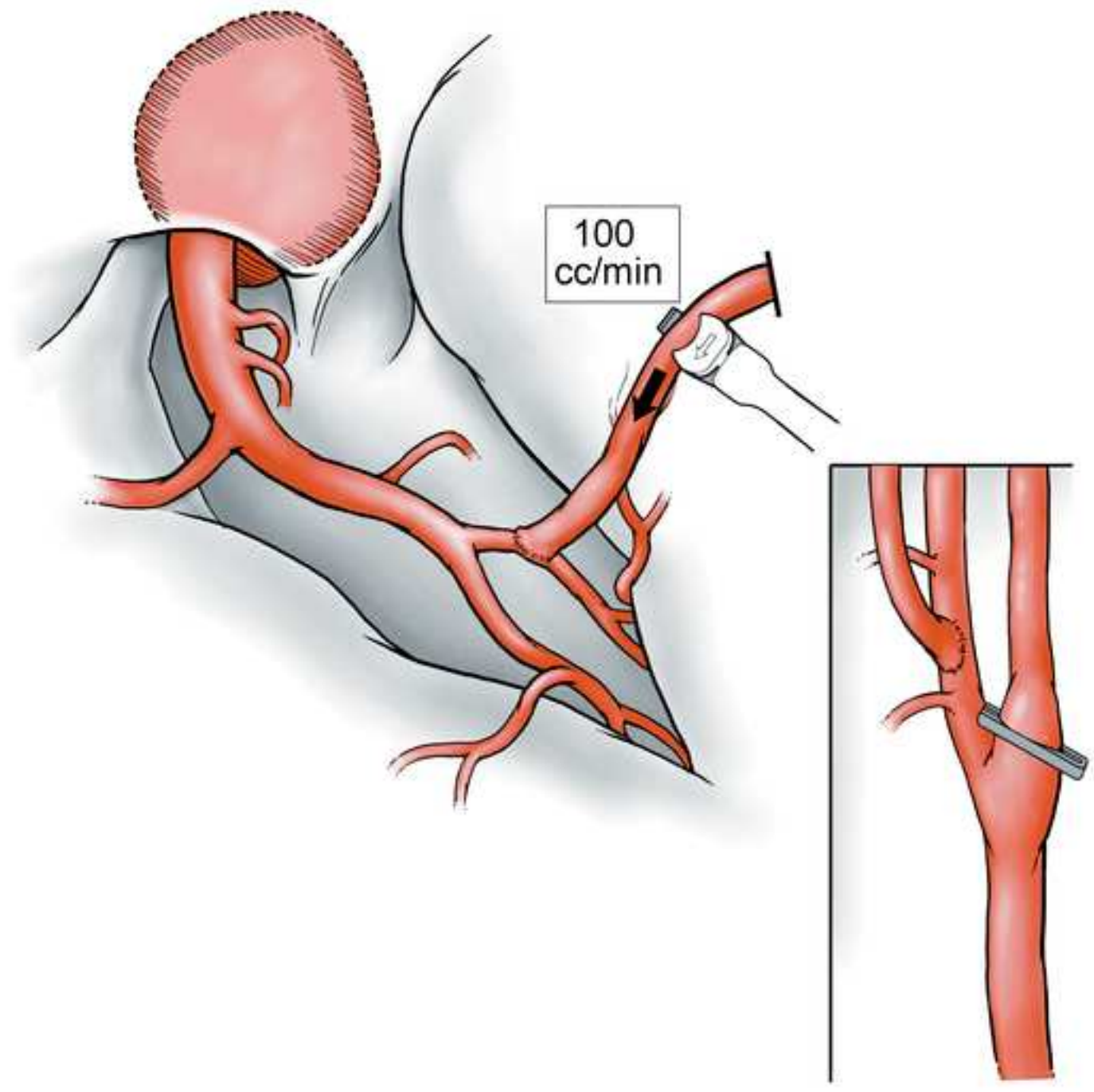


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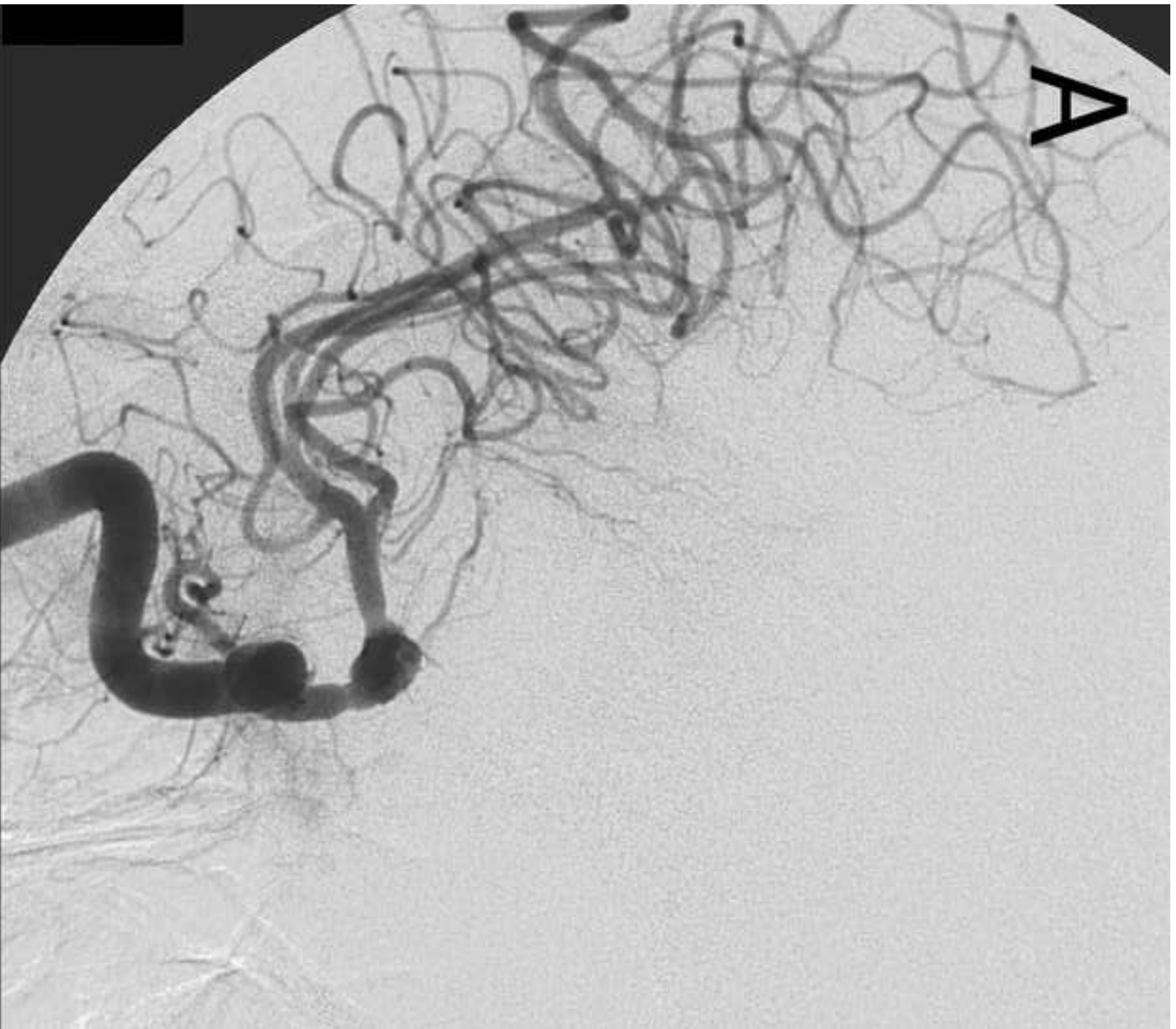


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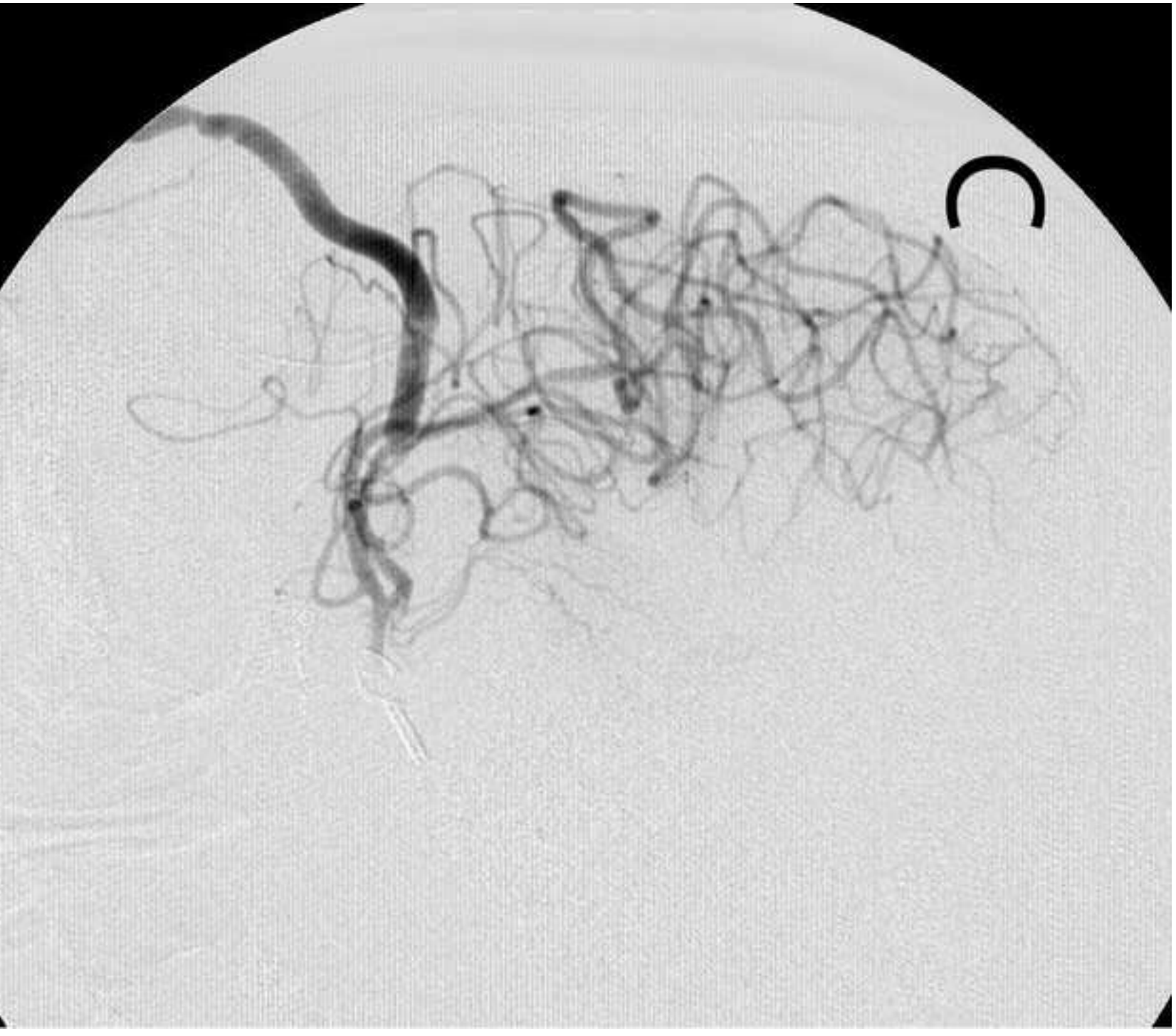


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