

Symptomatic Carotid Stenosis With Intraluminal Thrombi

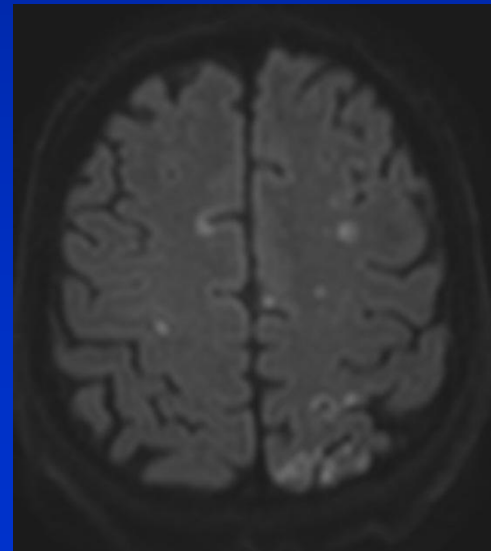
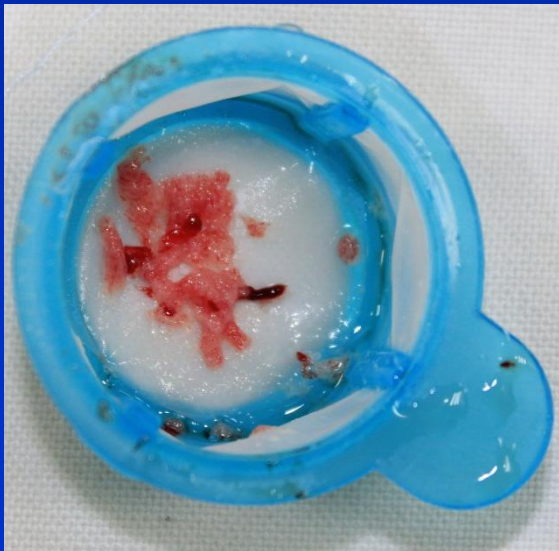
What Is The Best Treatment Option?

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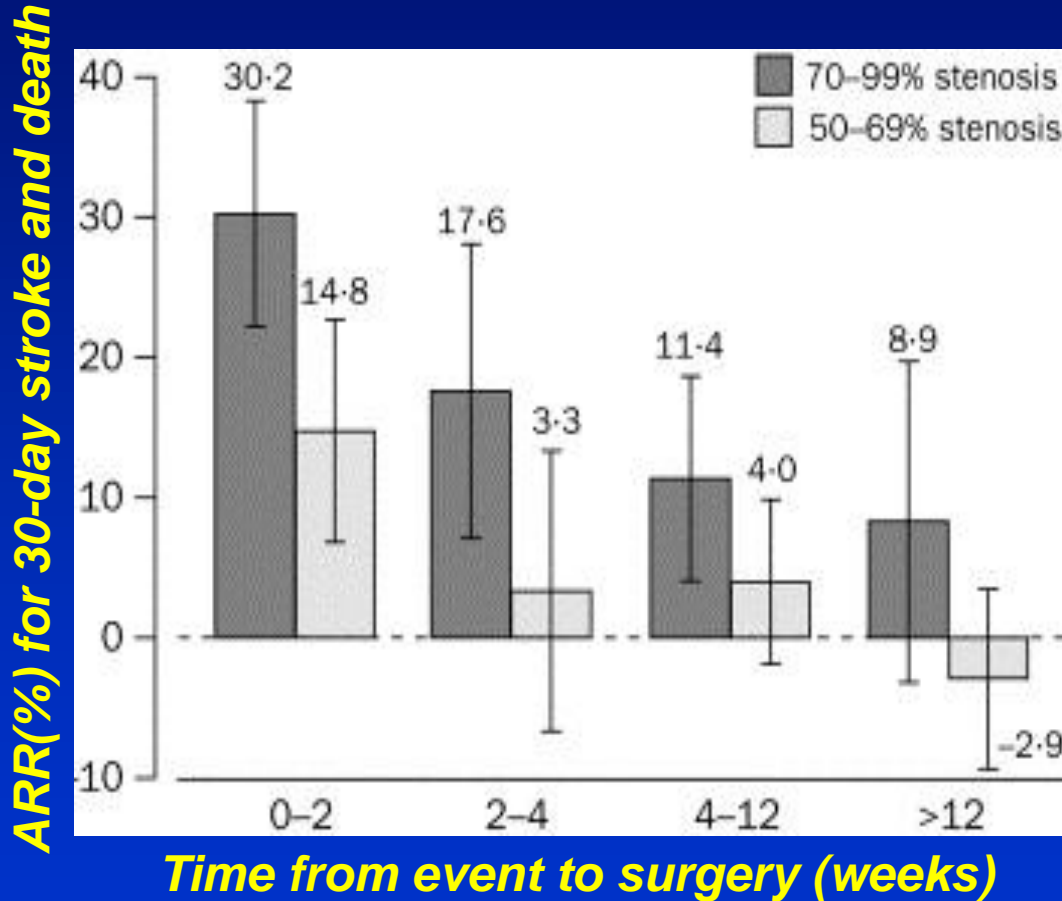
CAS Risk

- The greatest risk associated with CAS is periprocedural stroke or asymptomatic brain infarction due to embolization



Timing of CEA after Symptom

ECST & NASCET (n=1,174 surgery pts)



Early surgery ≤ 2 weeks

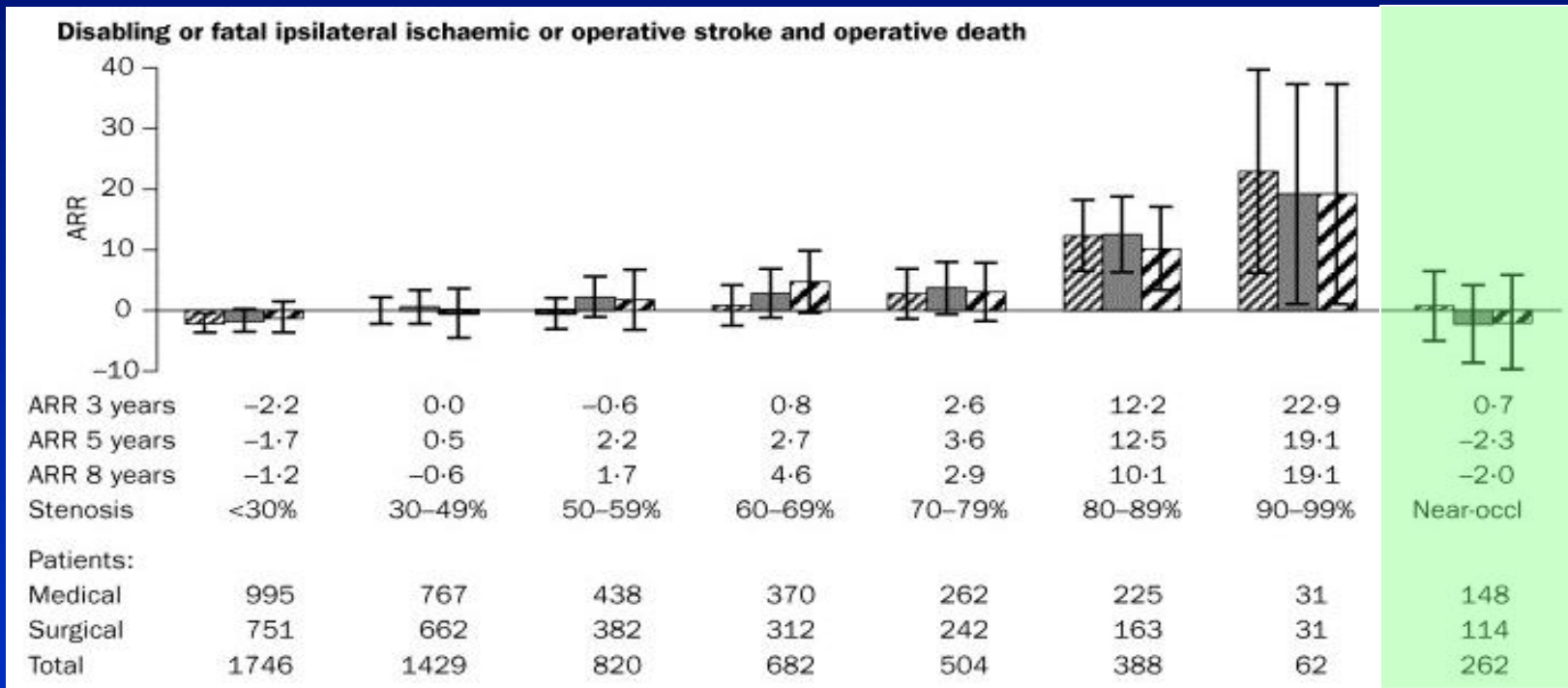
is better for symptomatic
50-99% stenosis.

Carotid near-occlusion
was excluded

Rothwell PM et al, *The Lancet* 2004;363:915-924

CEA for Near-Occlusion ?

ECST & NASCET (n=1,746 surgery pts)



No surgery benefit in carotid near-occlusion

Rothwell PM et al, *The Lancet* 2003;361:107-116

Symptomatic Carotid Near-Occlusion or Thrombi Containing Lesion

Early vs. Late Recanalization?

- ***Early recanalization strategy is better***
 - reduce recurrent embolic event
 - prevent total occlusion
 - reduce hemorrhagic transformation by warfarin
- ***Late recanalization strategy is better***
 - stabilize vulnerable plaque
 - dissolve thrombi by anticoagulation
 - reduce periprocedural embolic event

Case 1

59 years old man

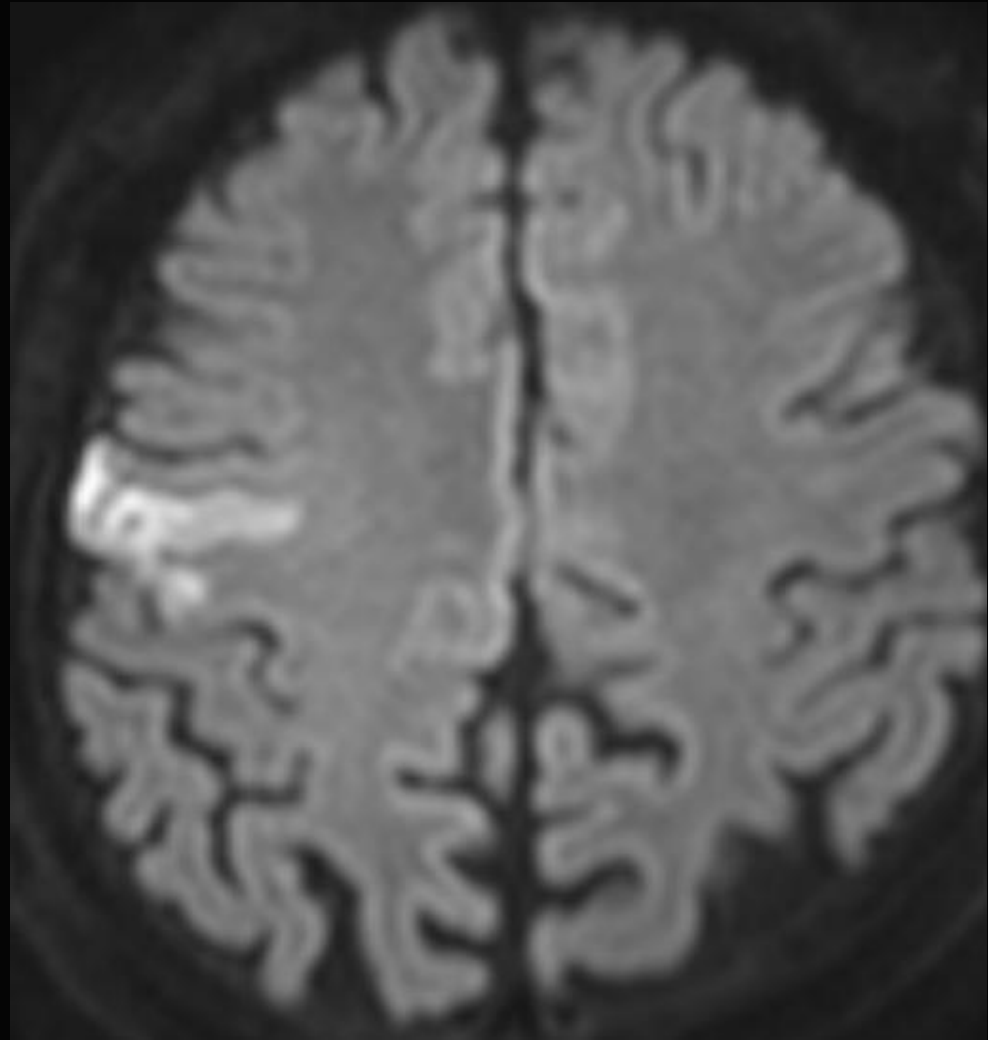
DM, HT, Smoker

Dysarthria and left

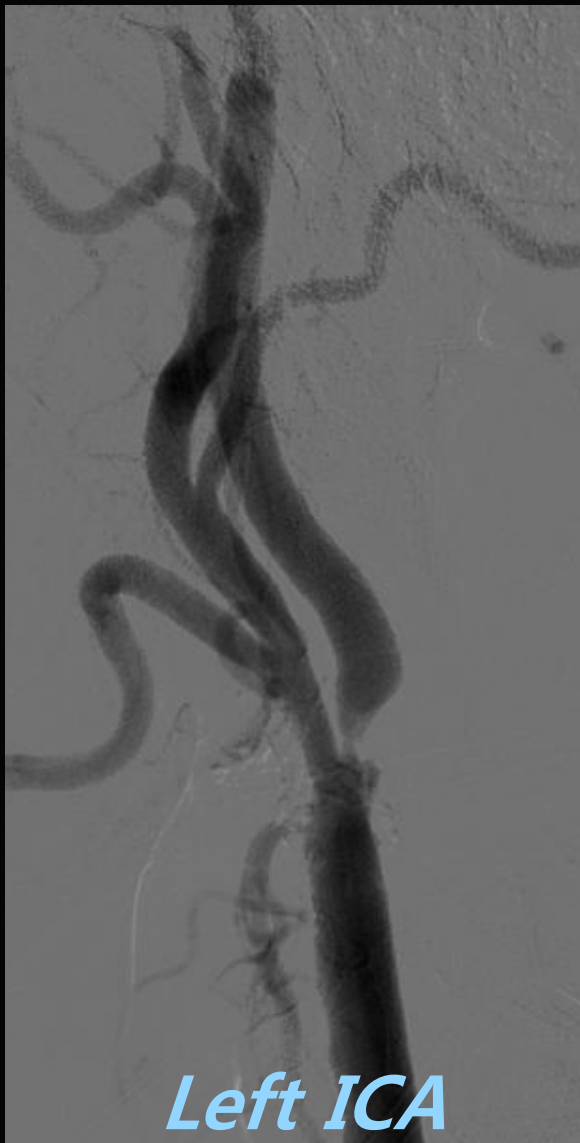
facial palsy, 3DA

Exertional angina

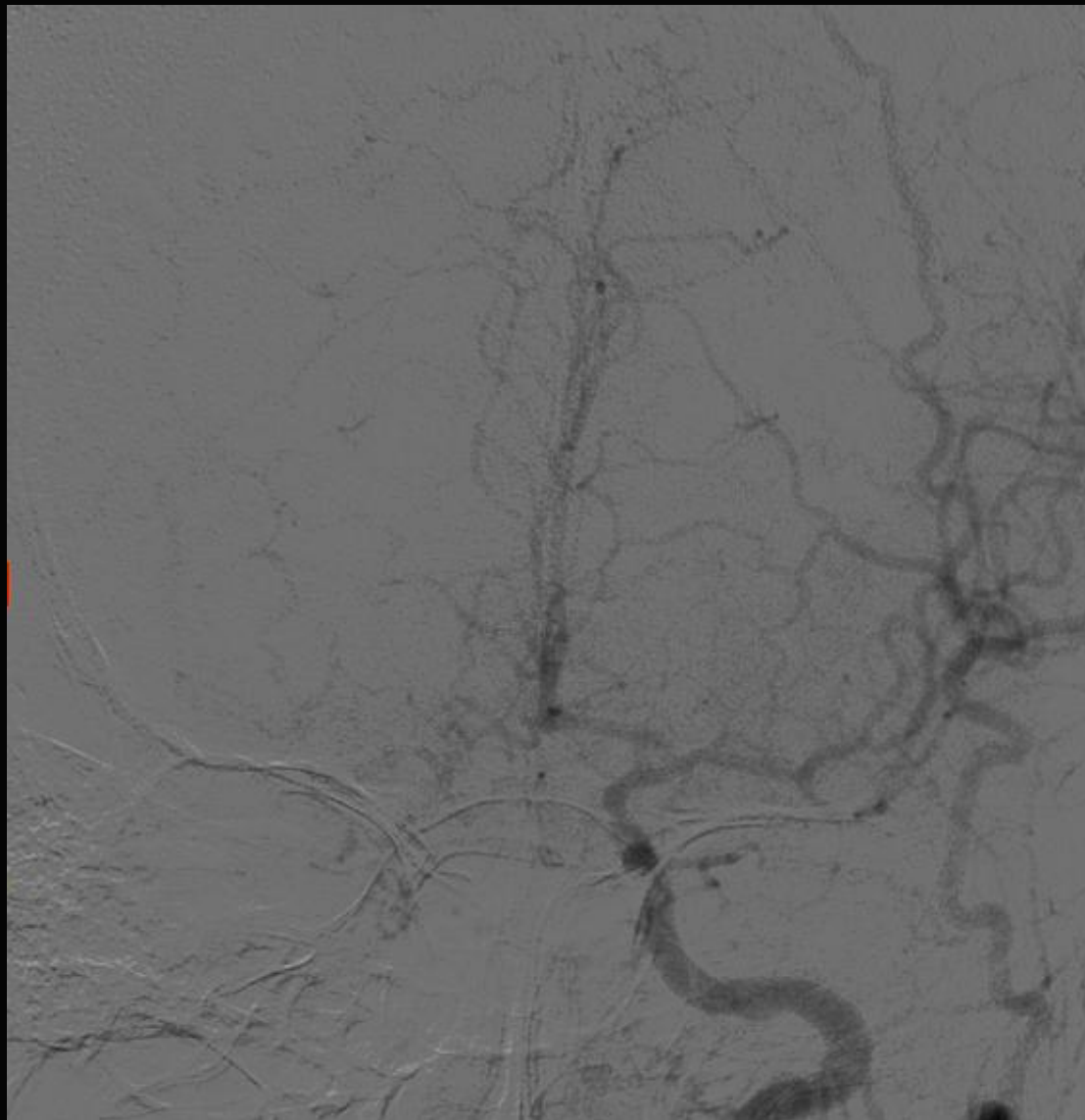
Resistant HT



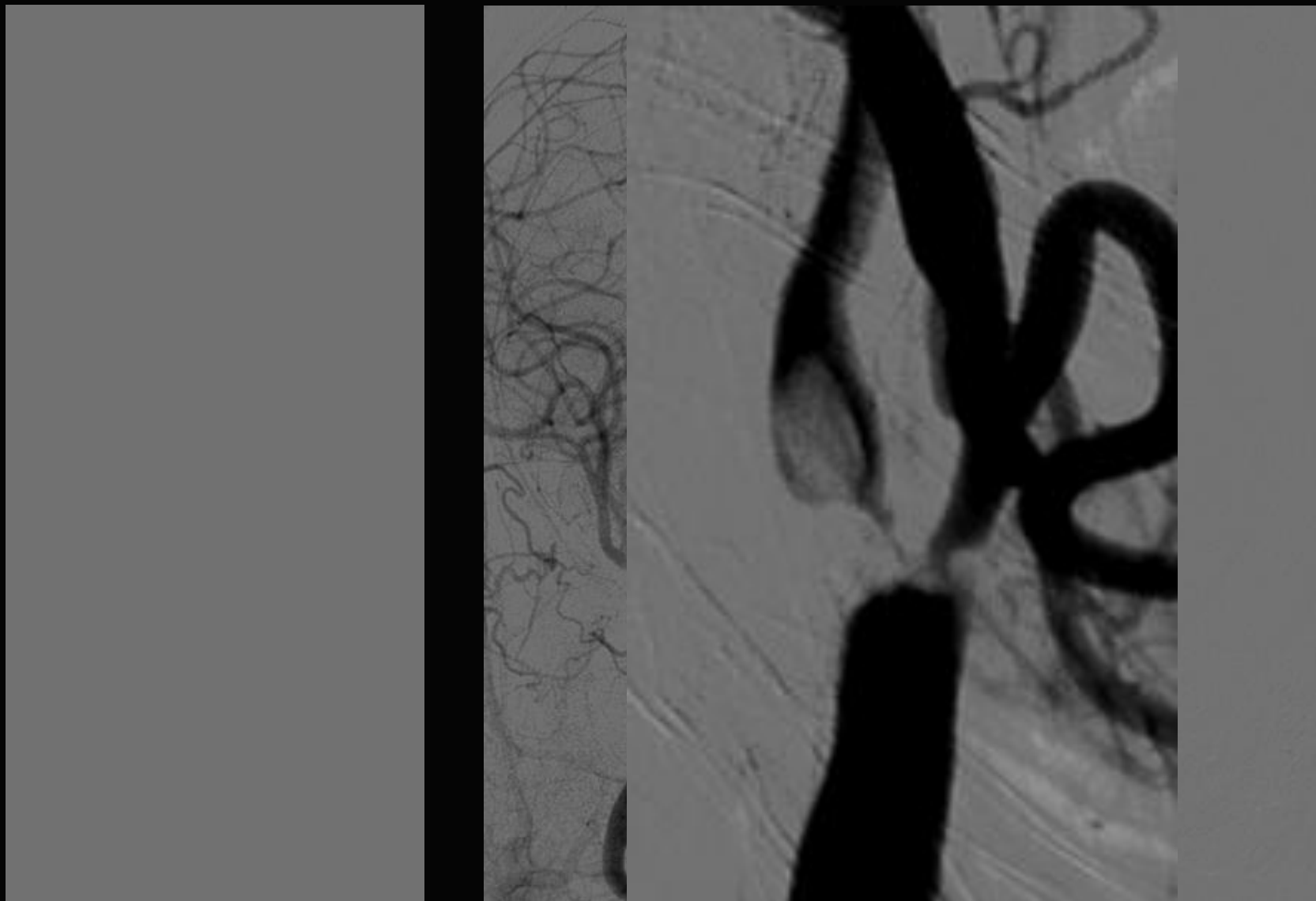
Left carotid angiogram



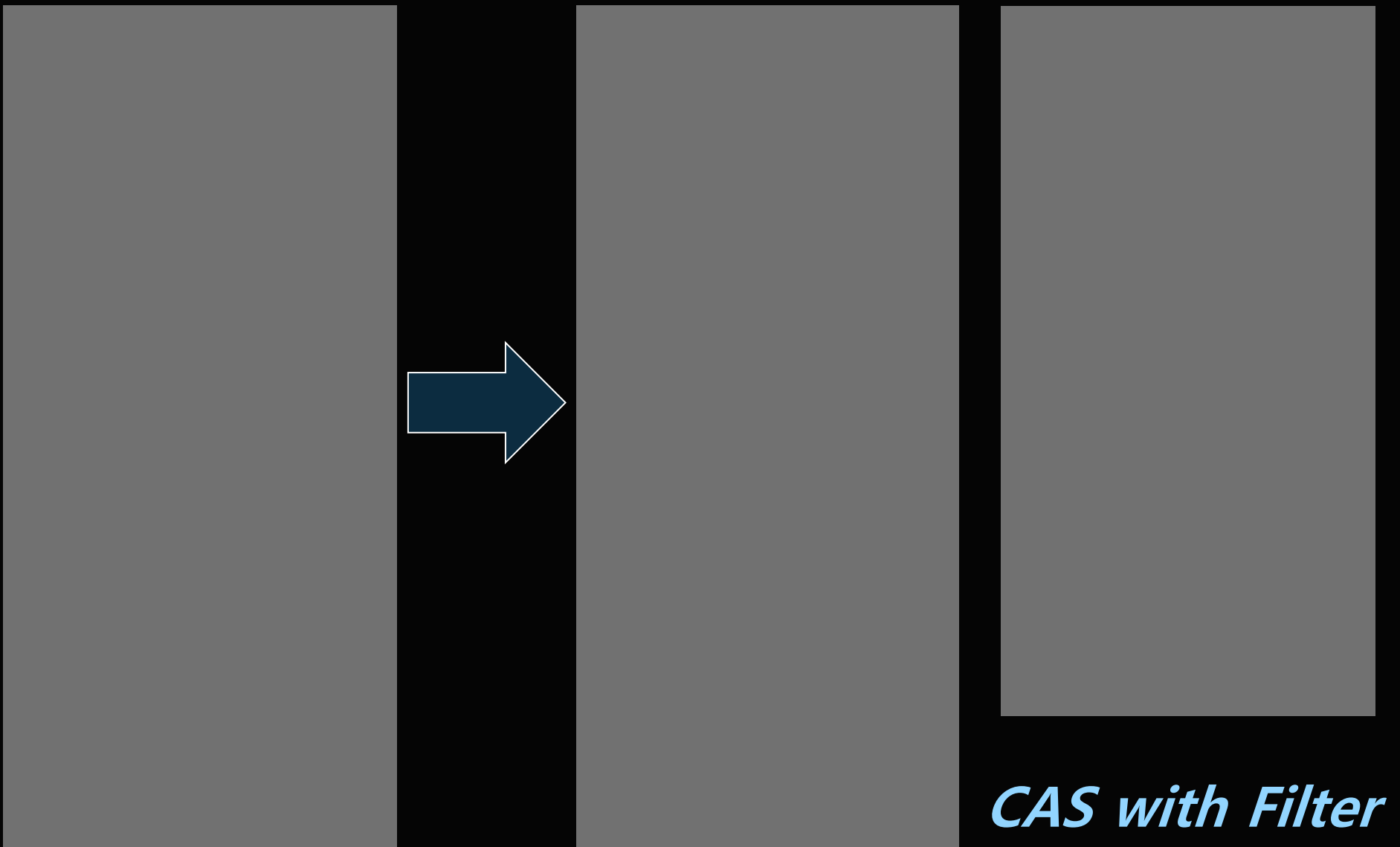
Left ICA



Right carotid angiogram

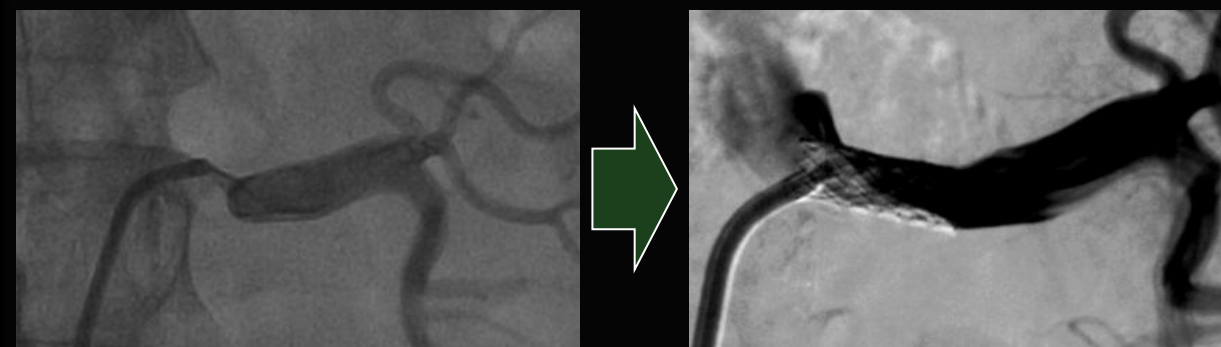


Warfarinization for 6 weeks

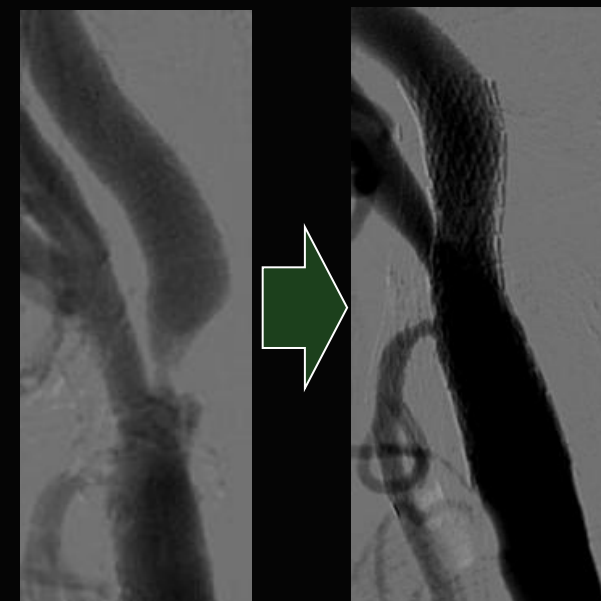


CAS with Filter

Renal / LMCA / Left carotid stenting



Renal stenting with Filter protection



Rt. CAS with Filter



RCA occlusion, Left main stenting

Case 2

58 years old man

HT, Smoker

Recurrent right weakness
for 10 days



Visible thrombi in left ICA

Warfarinization for 6 weeks



Dissolution of initial filter in port treatment

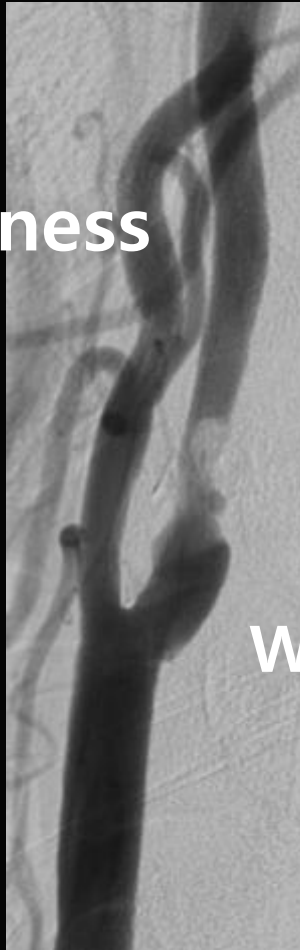
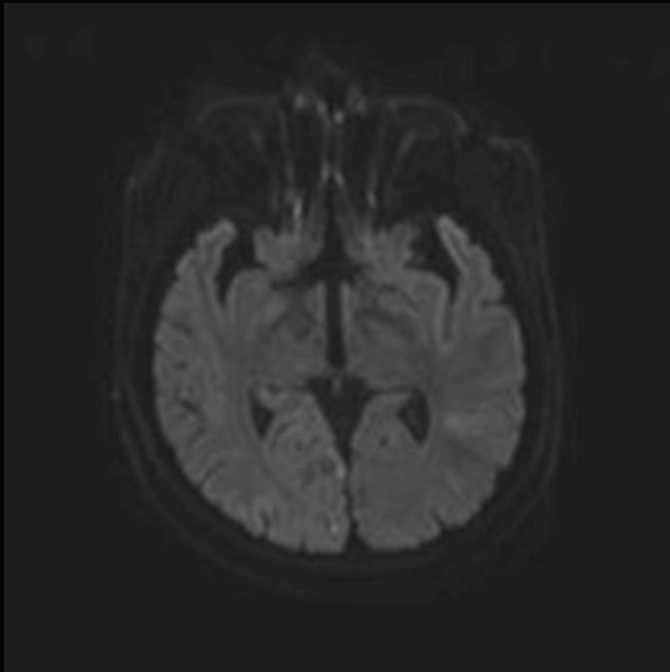
Case 3

64 years old man

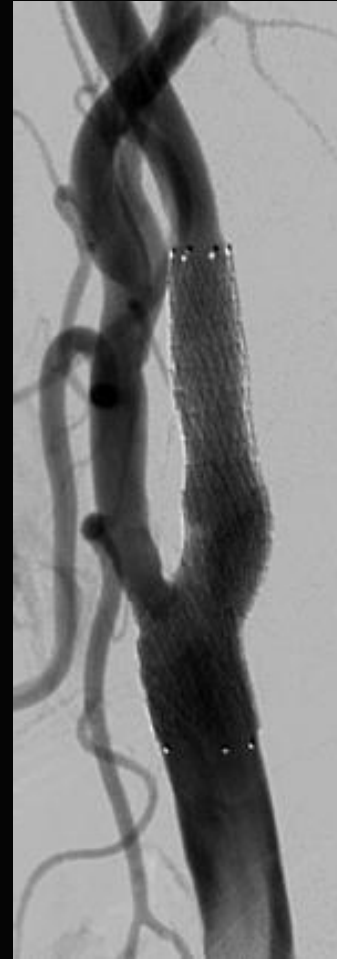
HT

Old CI, 1995

Transient left weakness



Warfarin
6wks

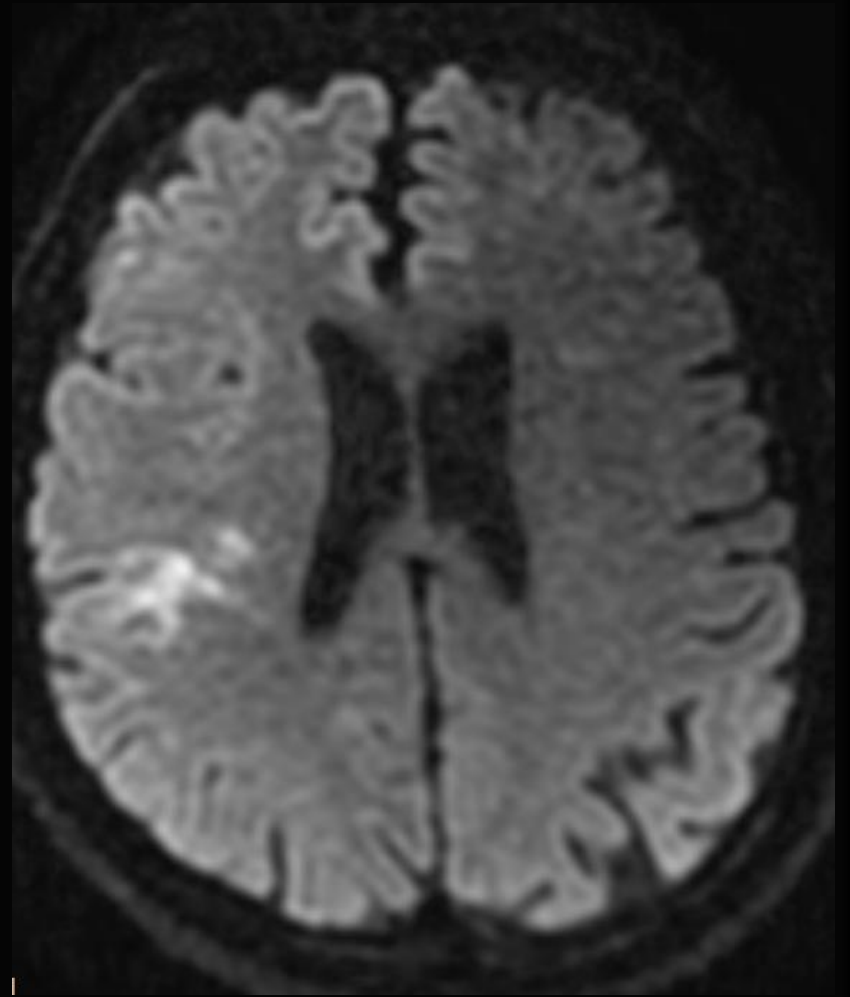


Case 4

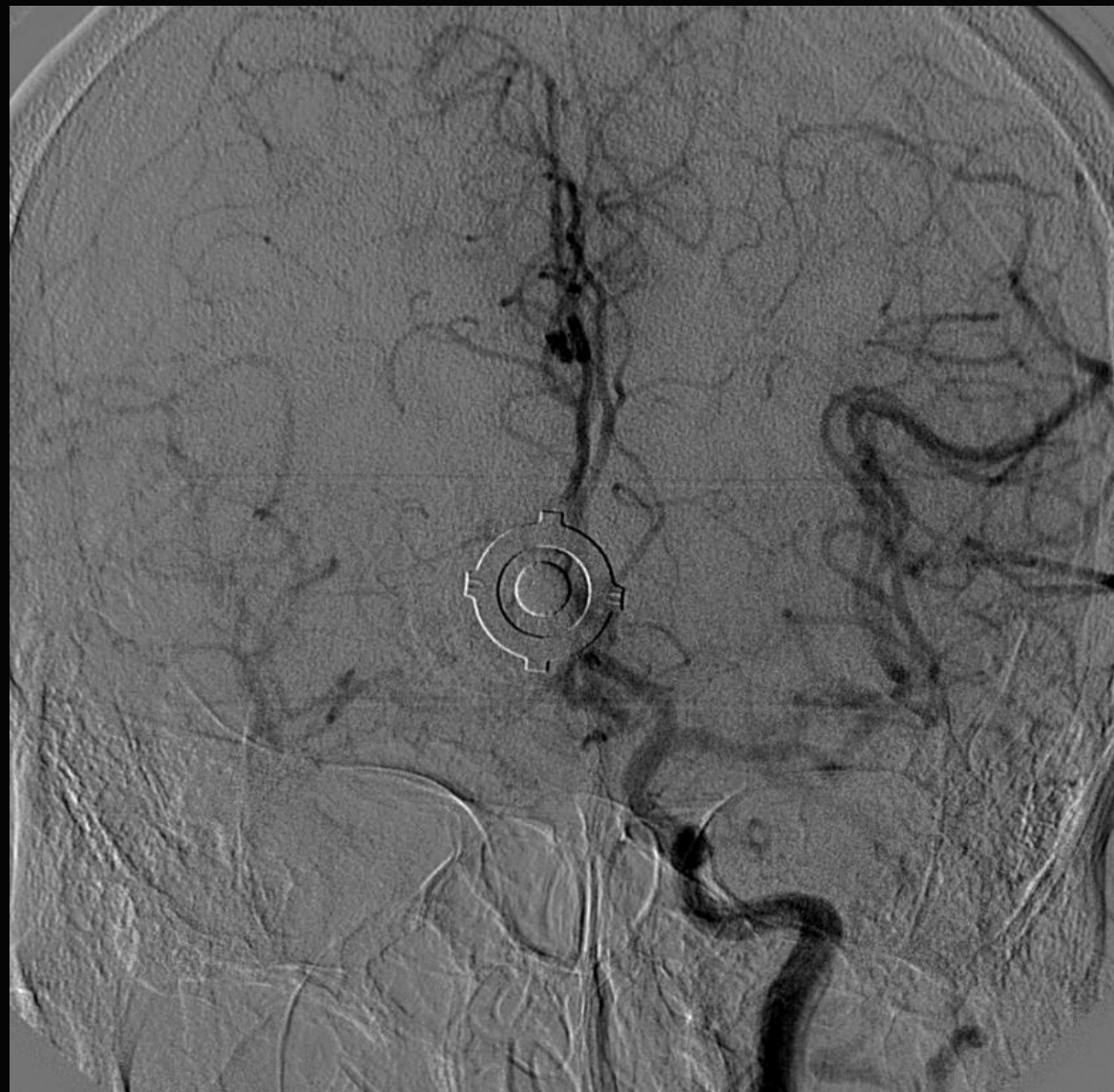
69 years old man

DM, Exsmoker

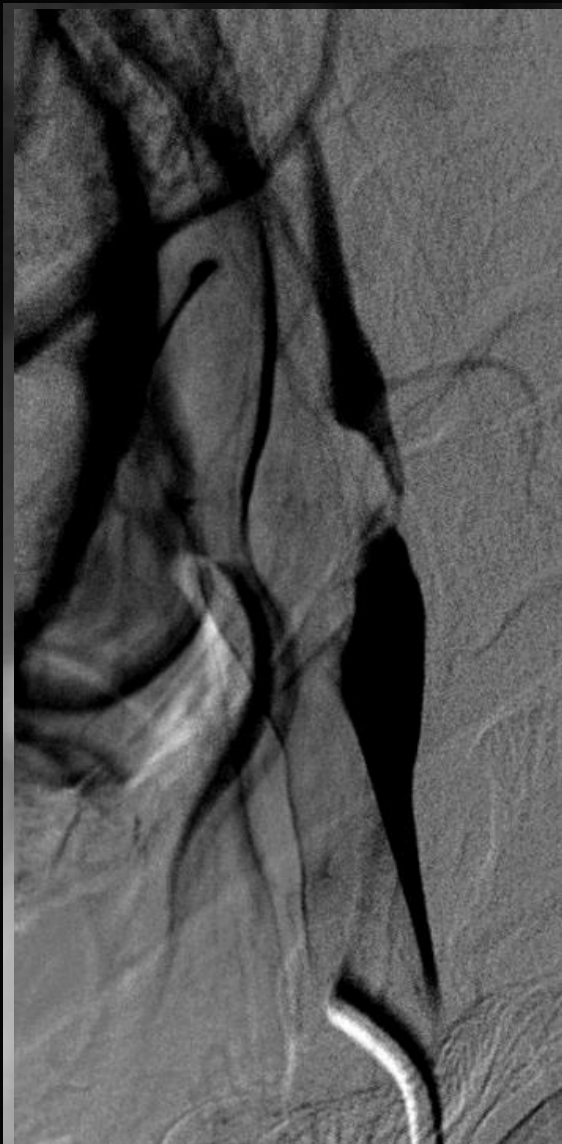
Dysarthria and falling
tendency in the morning



Left carotid angiogram



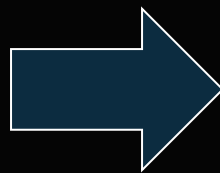
Right carotid angiogram



Warfarinization for 6 weeks



6wks



ASx

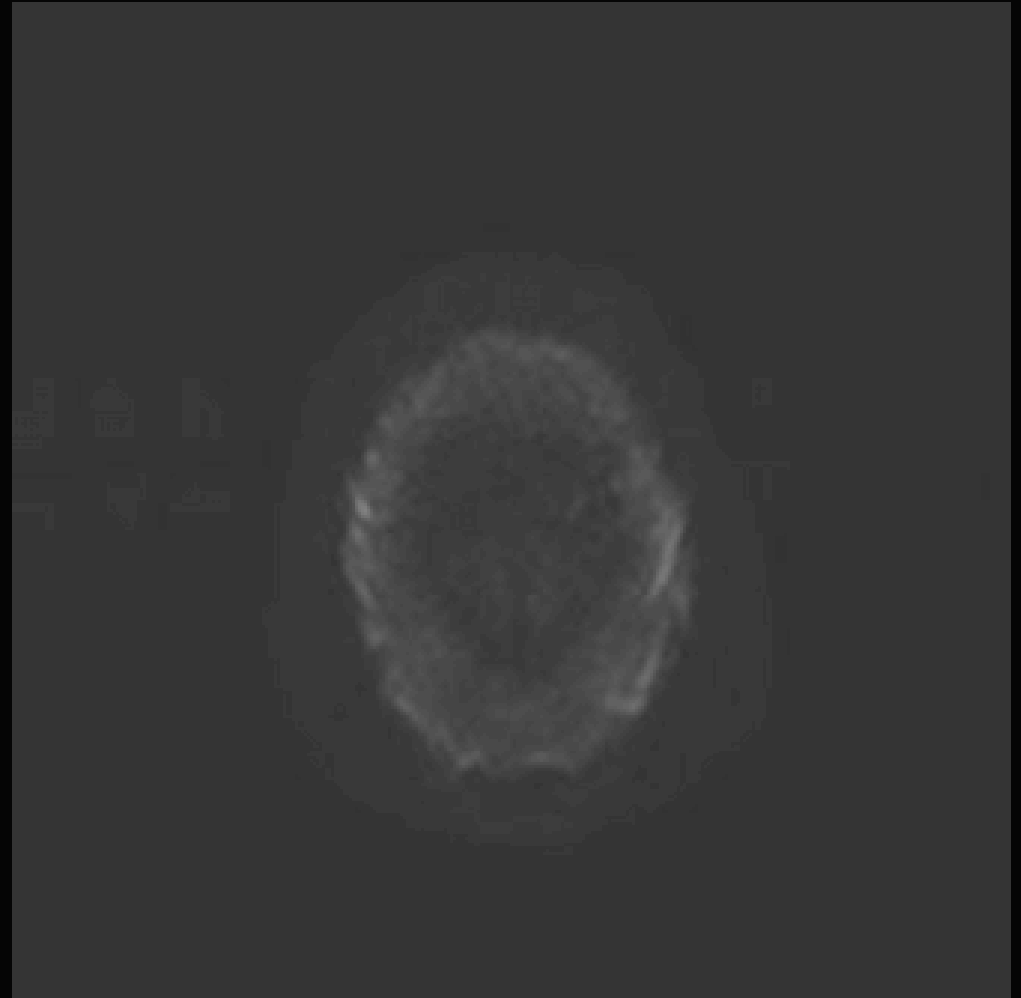


After MO.MA Available

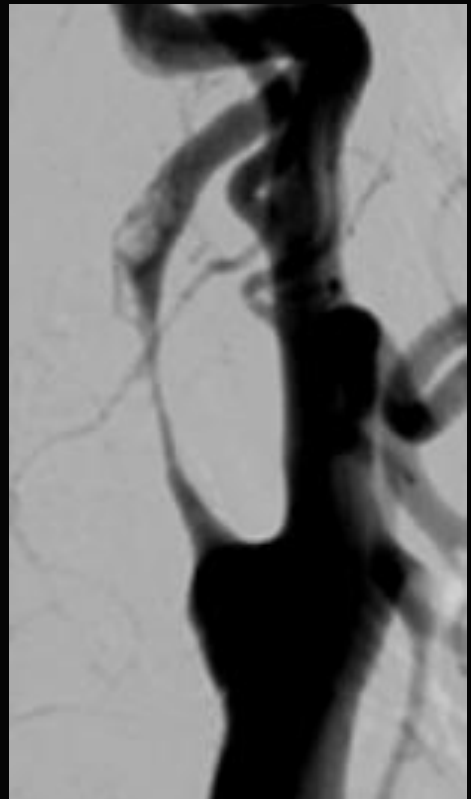
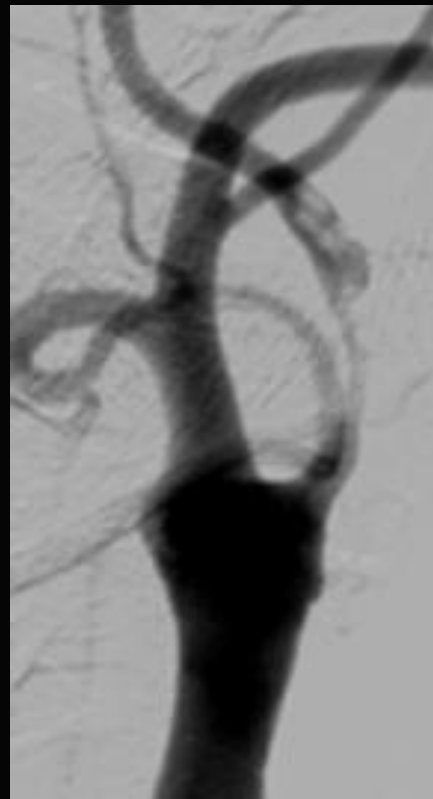
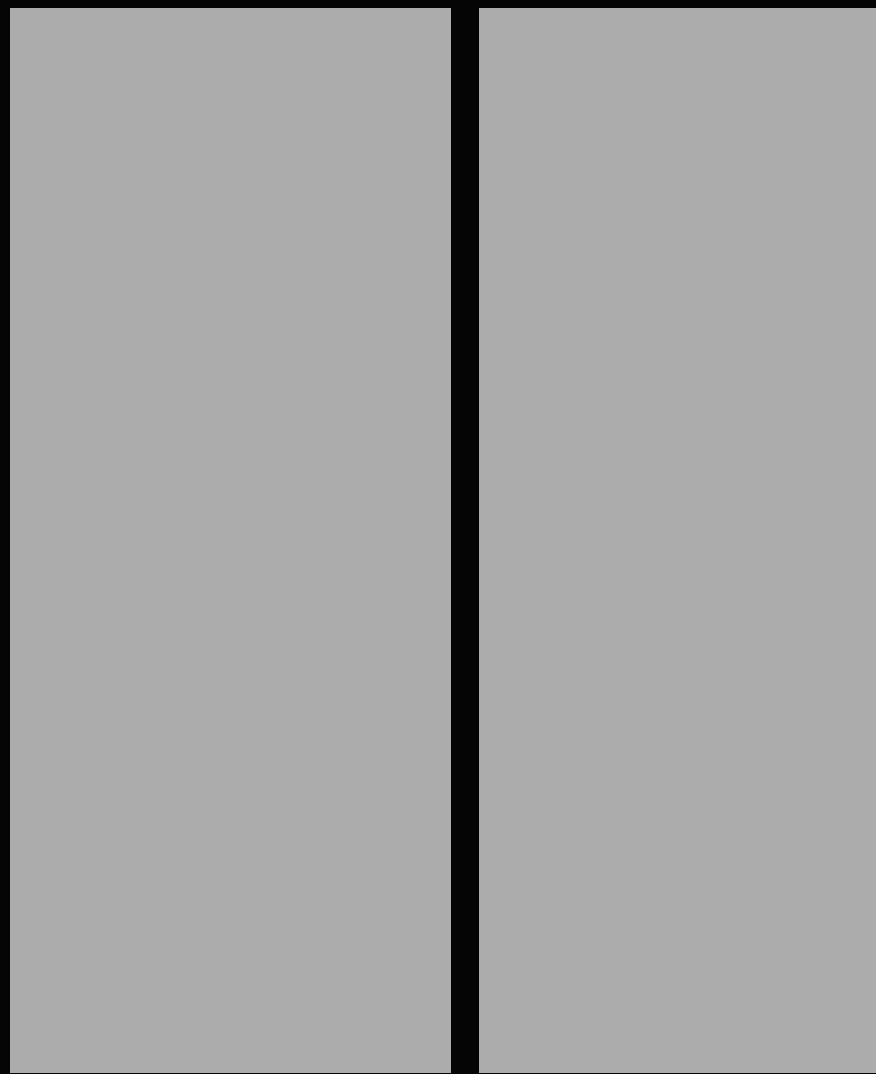
since Jul. 2012

Case 5

73 years old man
HT, Dyslipidemia
Right hemiparesis
and dysarthria

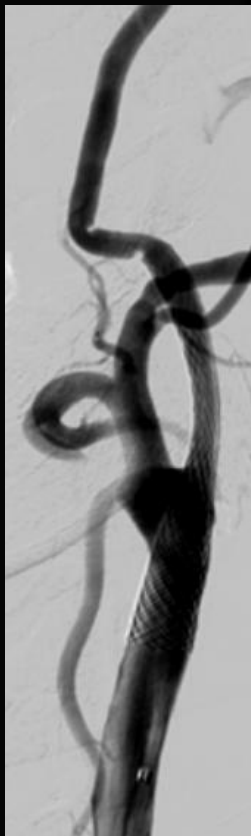
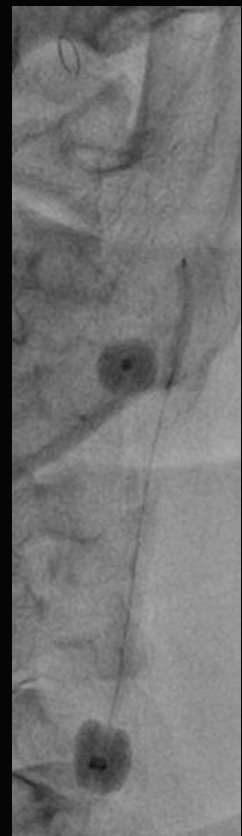


Left carotid angiogram in 7 days



Visible intraluminal thrombi

CAS with MO.MA and Filter protection



MO.MA

*Filterwire
Passage*

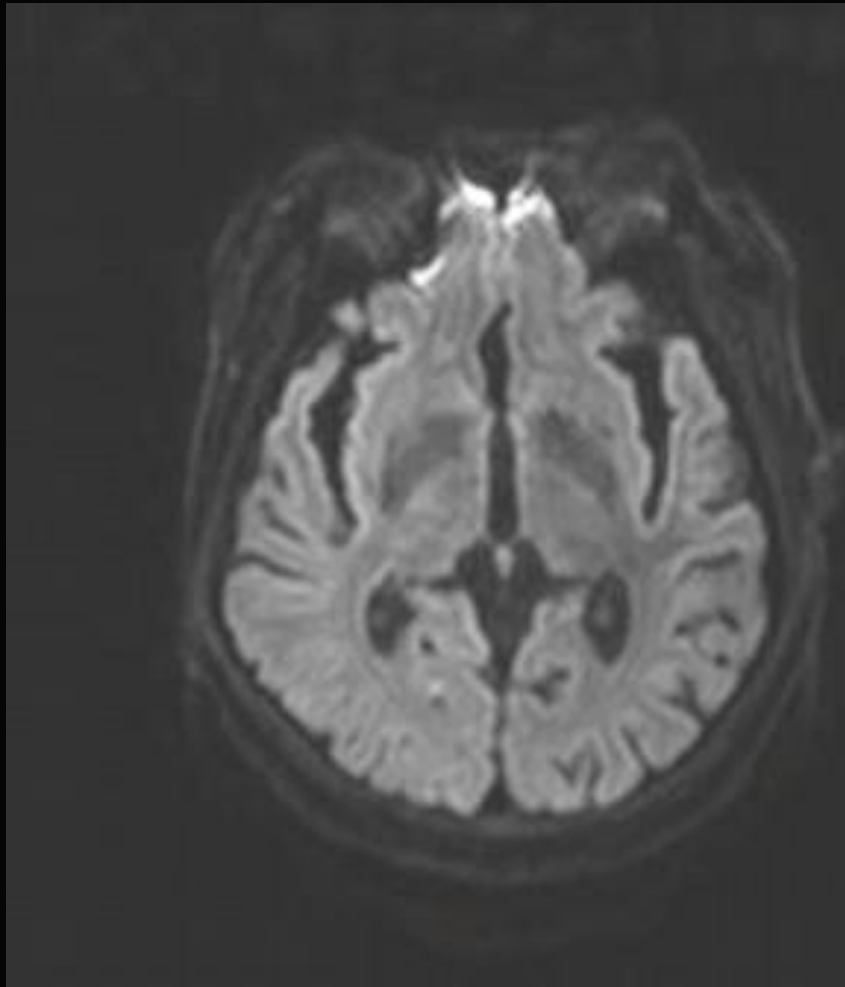
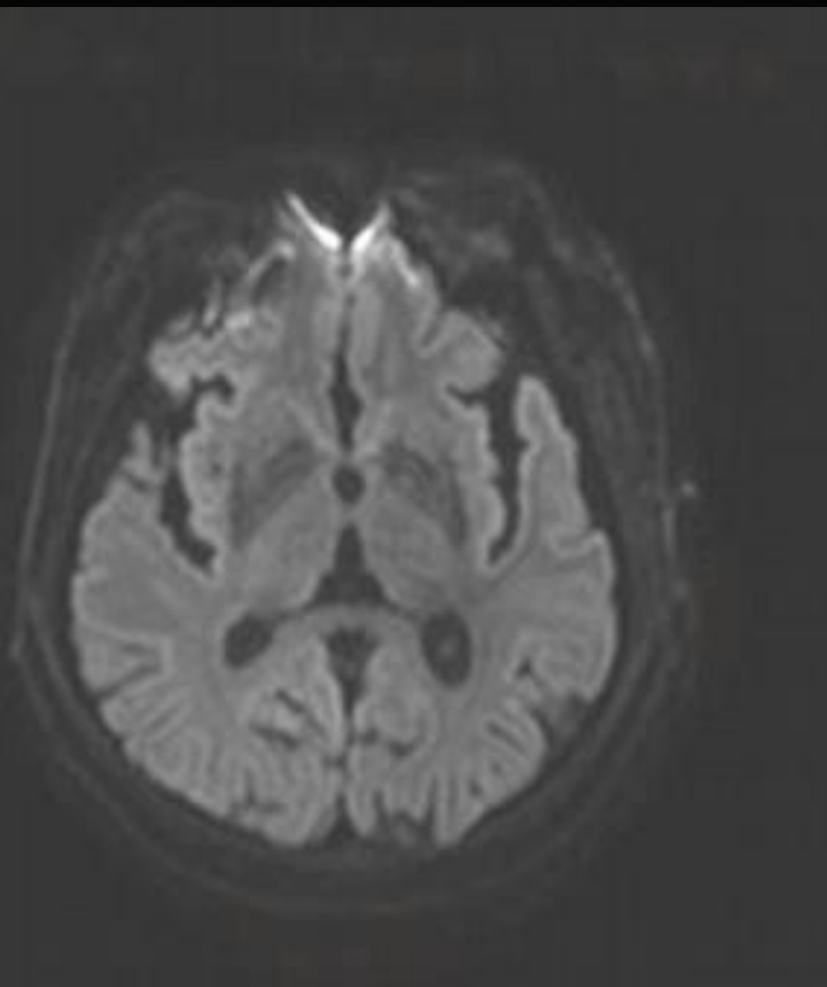
Predil

*Wall
stent*

Postdil

*1st Suction
Filter retrieval
2nd Suction*

No New DW HSI after CAS



Case 6

70 years old man

DM, HT

AAA → open repair, 7YA

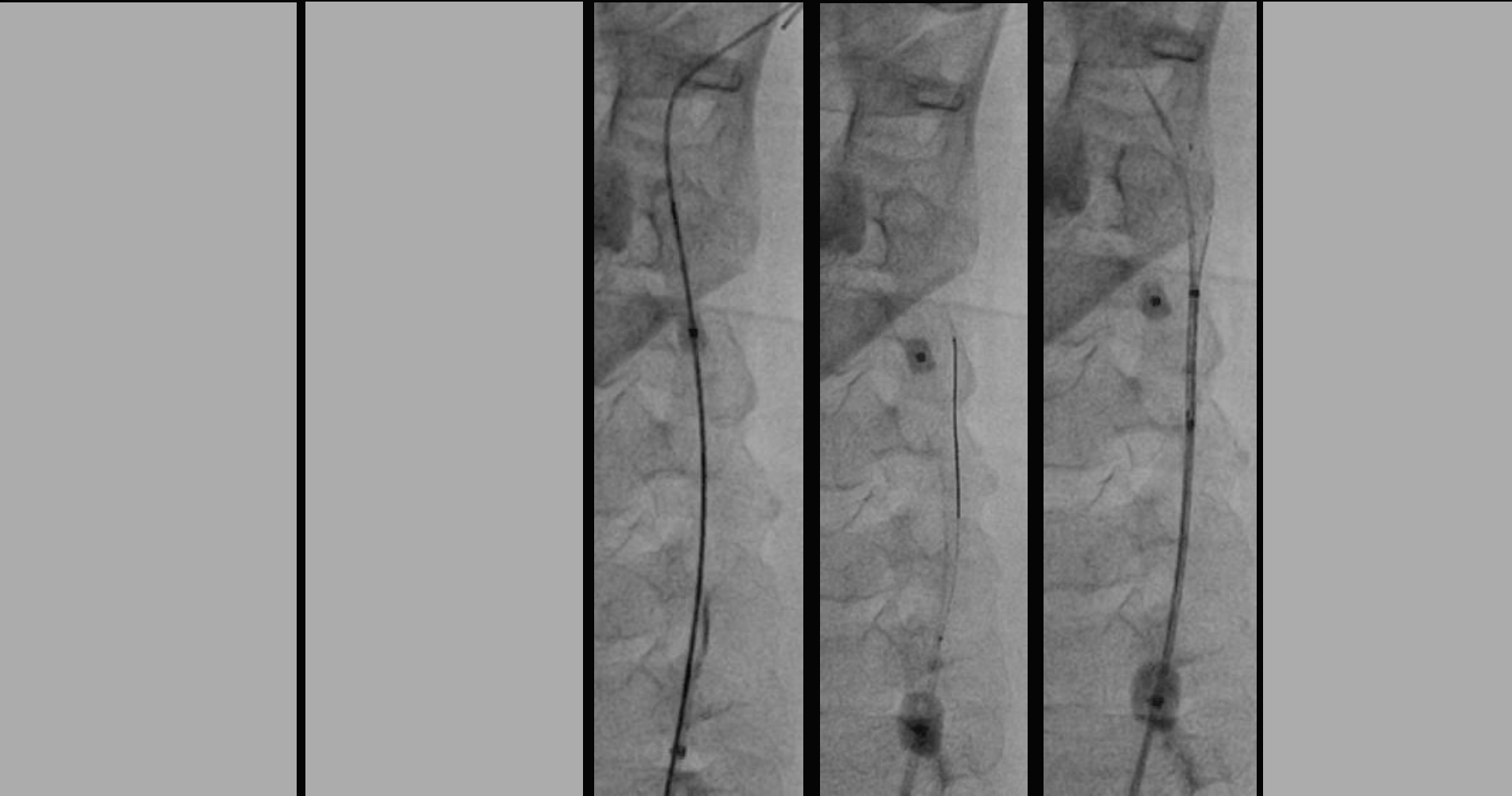
Rectal cancer → S/P LAR, 7YA

NSCLCa, stage I

→ S/P Wedge resection, VATS

Right weakness and dysarthria, 3 days after op.

Left carotid angiogram in 10 days



Intraluminal thrombi

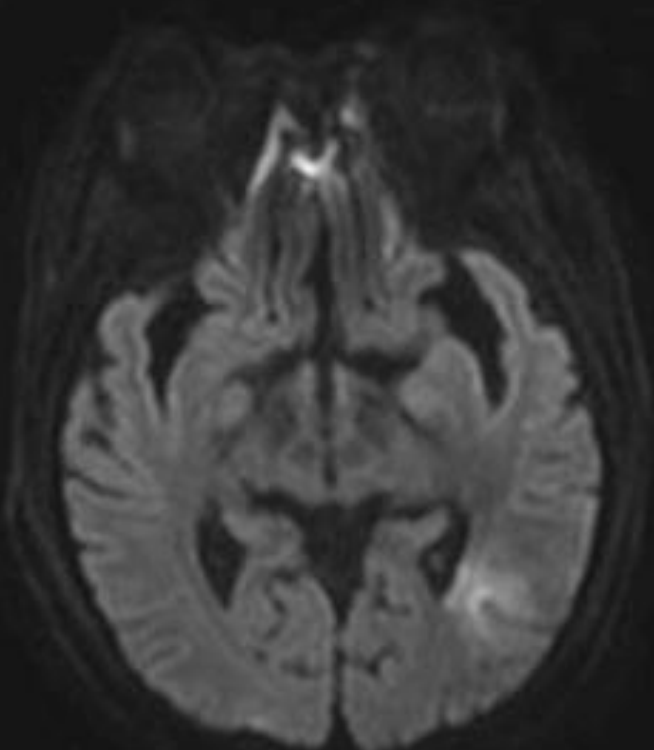
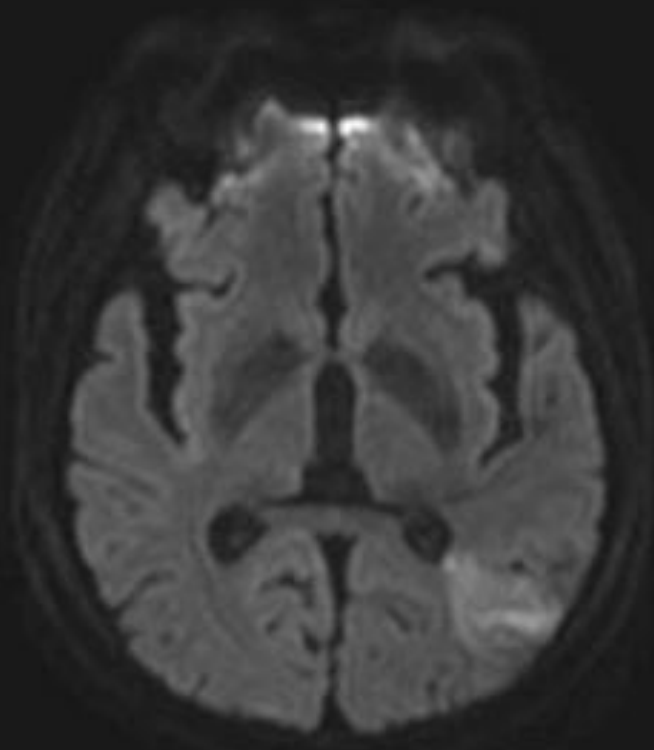
MO.MA

Wire passage

Cristallo stent

Thrombi prolapse

No New DW HSI after CAS



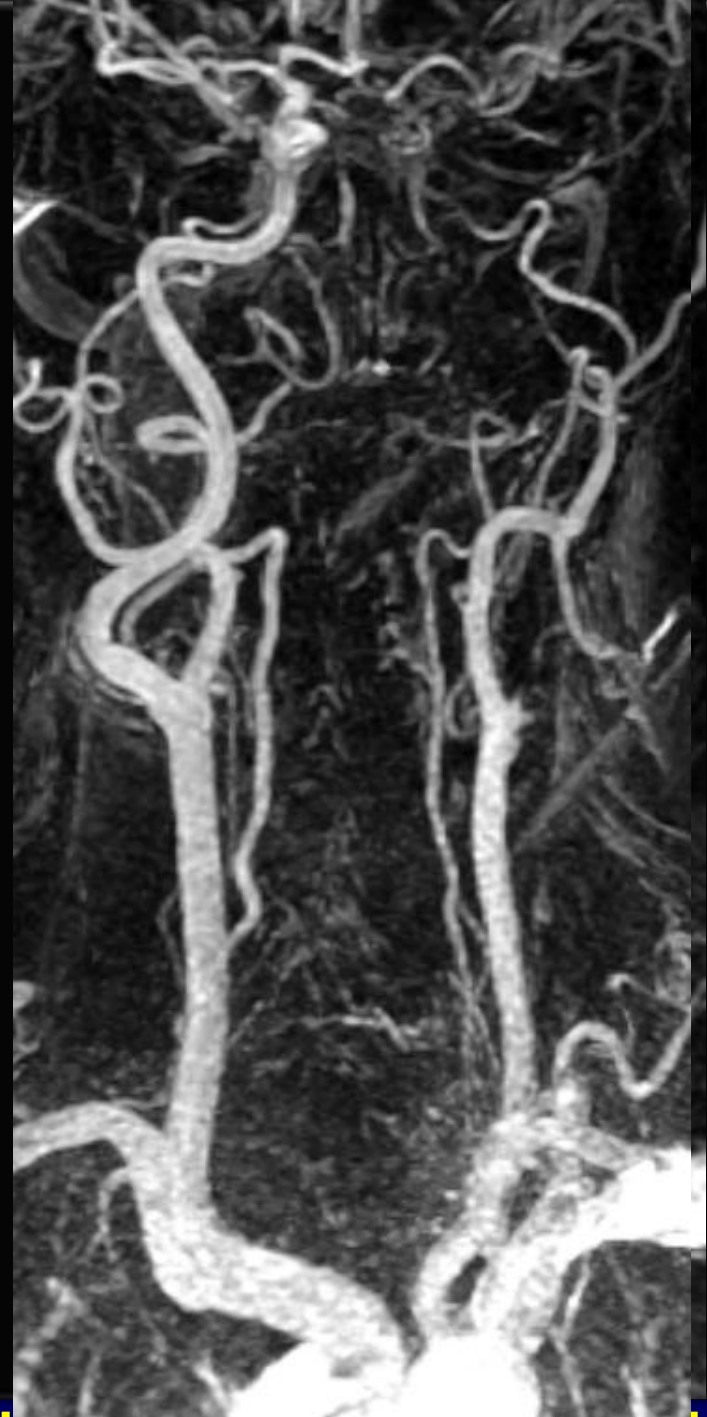
Case 7

68 years old woman

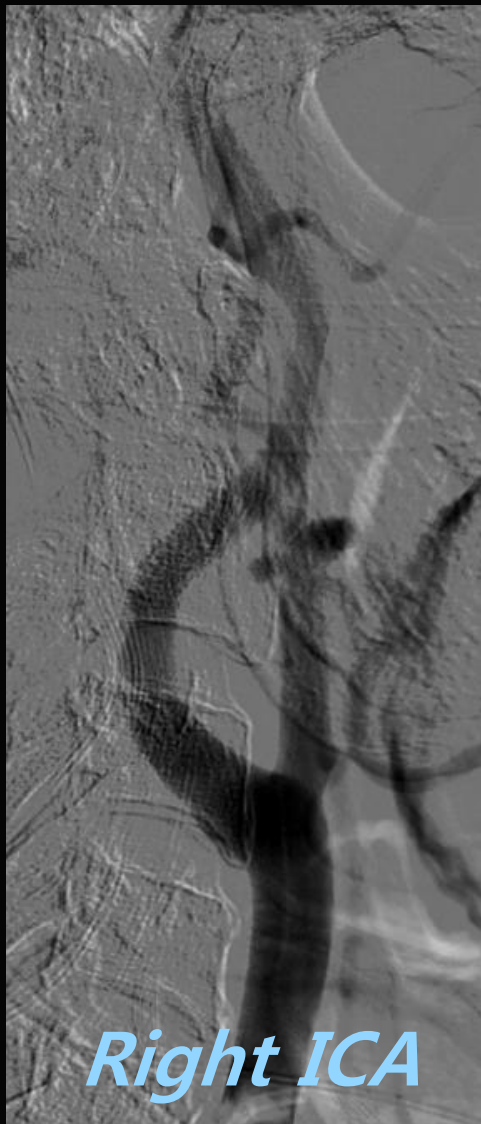
DM, HT

Lacunar CI, 1YA

Acute onset dysarthria
and hearing difficulty
for 1 hour



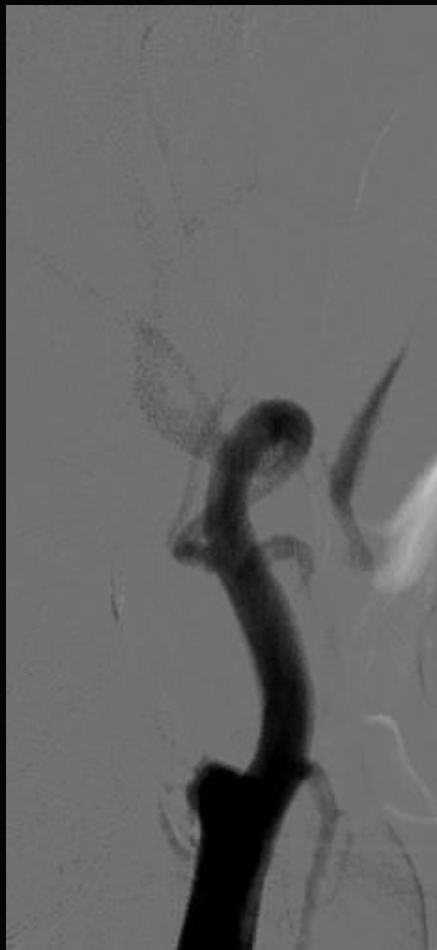
Right carotid angiogram



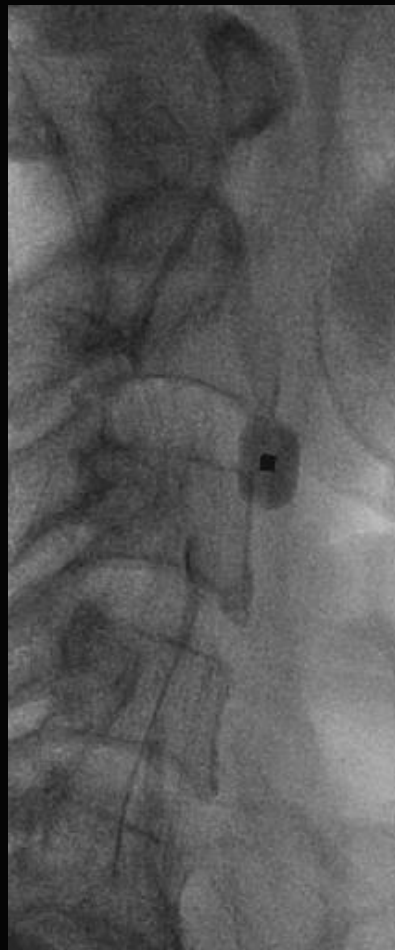
Right ICA



Left carotid stenting in 2.5 hrs



Occluded left ICA



MO.MA



Difficult passage



Parallel wiring

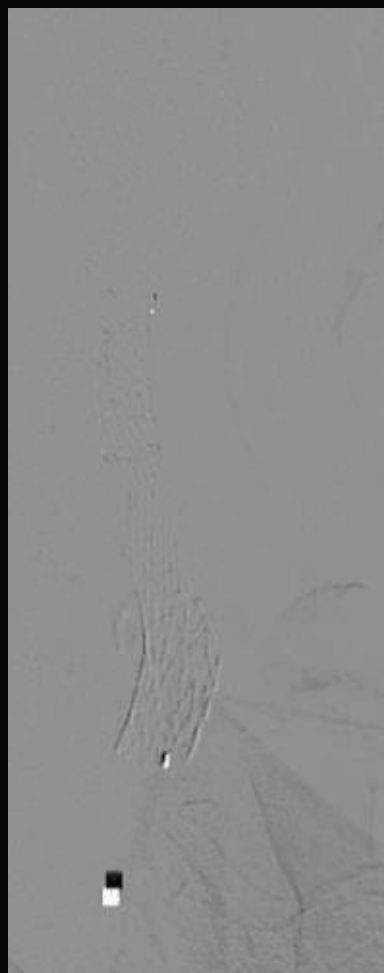
Left carotid angiogram in 2.5 hrs



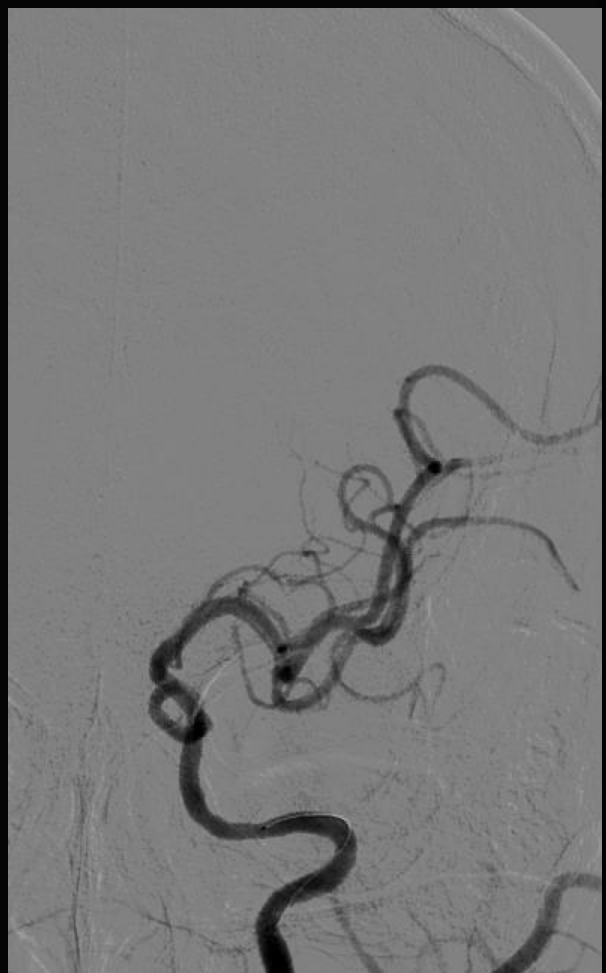
Predilation



*Suction
Stenting
Postdilation*



*Completely recovered
neurologic function*



Conclusion

- *Symptomatic carotid stenosis with intraluminal thrombi*
 - Early CAS with proximal &/or combined distal filter protection can be safe and feasible.
 - We need more data for these patient subsets.