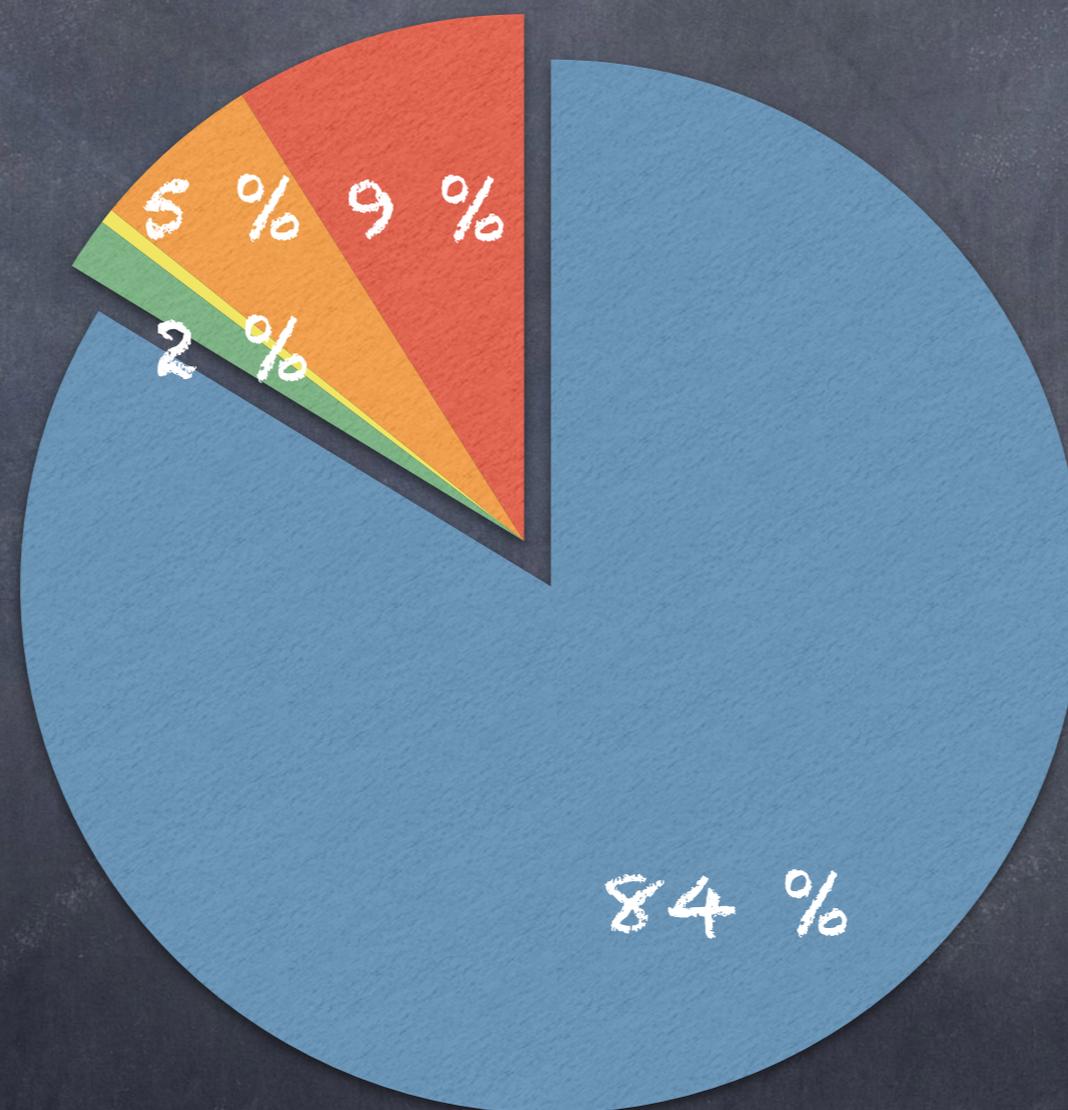


Comment Gérer les Complications

S. Saleme, A. Rouchaud, C. Mounayer
Service de Neuroradiologie Interventionnelle
CHU de Limoges

Complication Immédiate

ASTER 2 J Neurointerv Surg. 2020 May;12(5):471-476



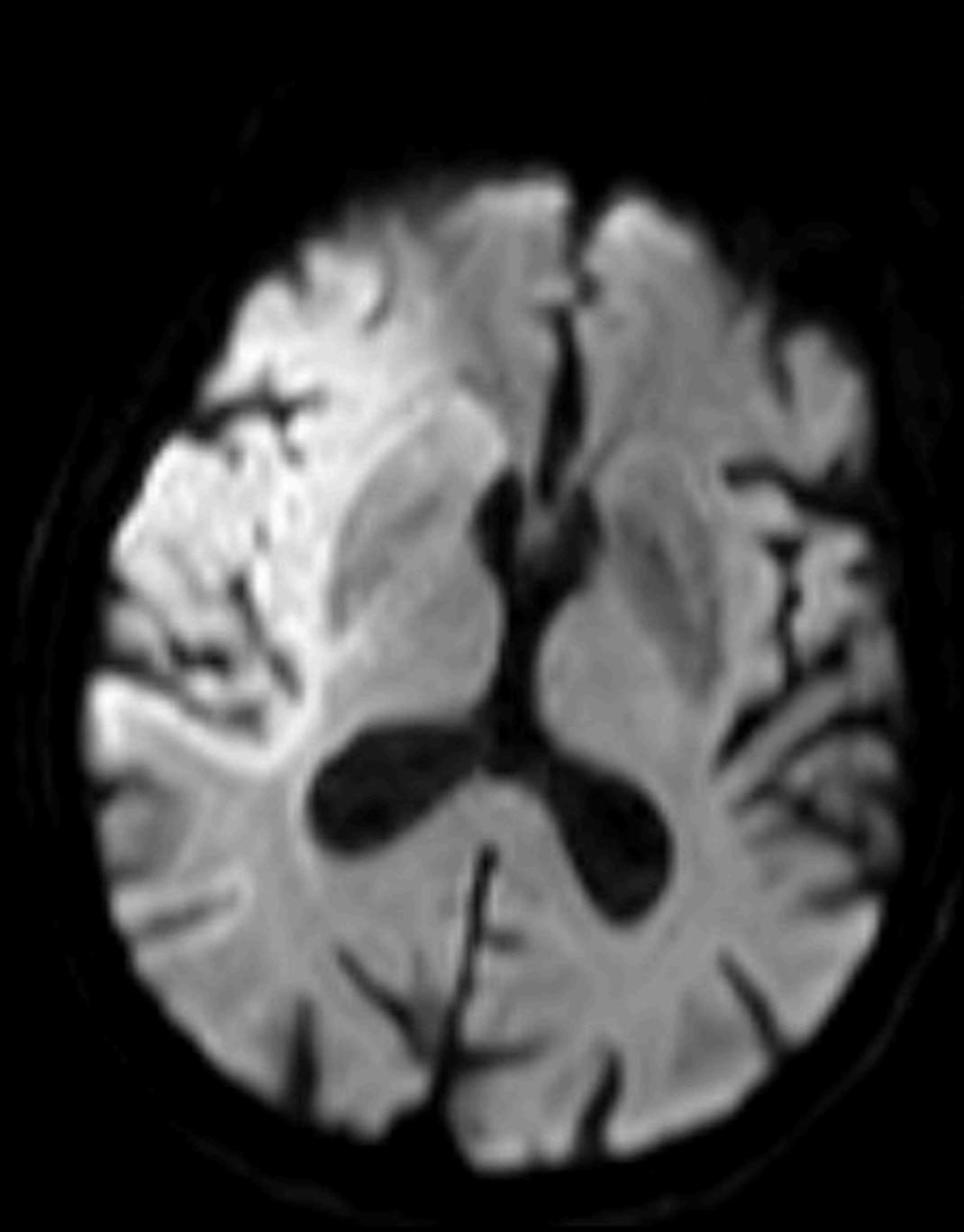
- Aucune
- Perforation
- Vasospasm
- Dissection
- Fragmentation/Migration

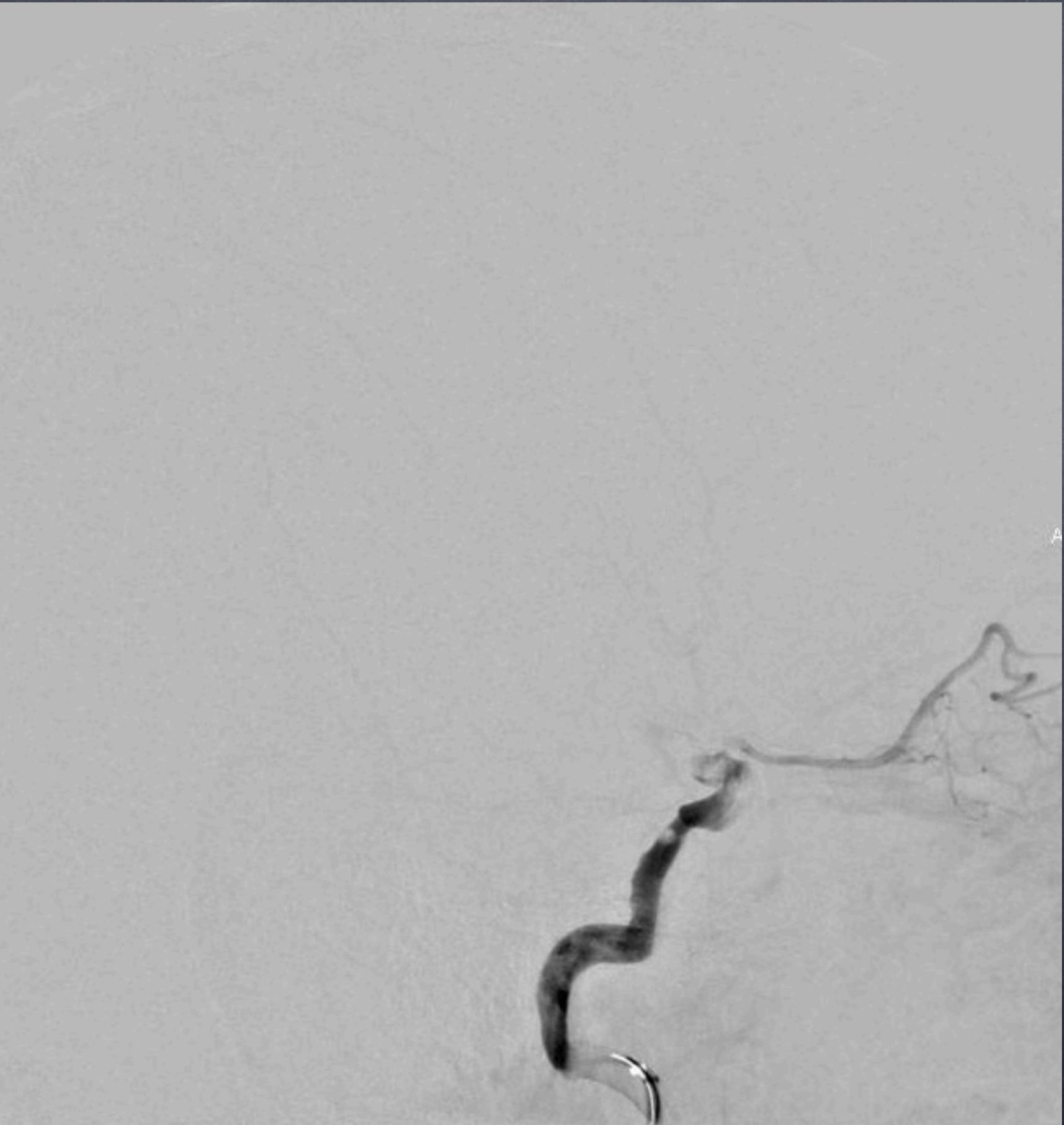
Complications

- Héorragique
- Ischémique
- Autres

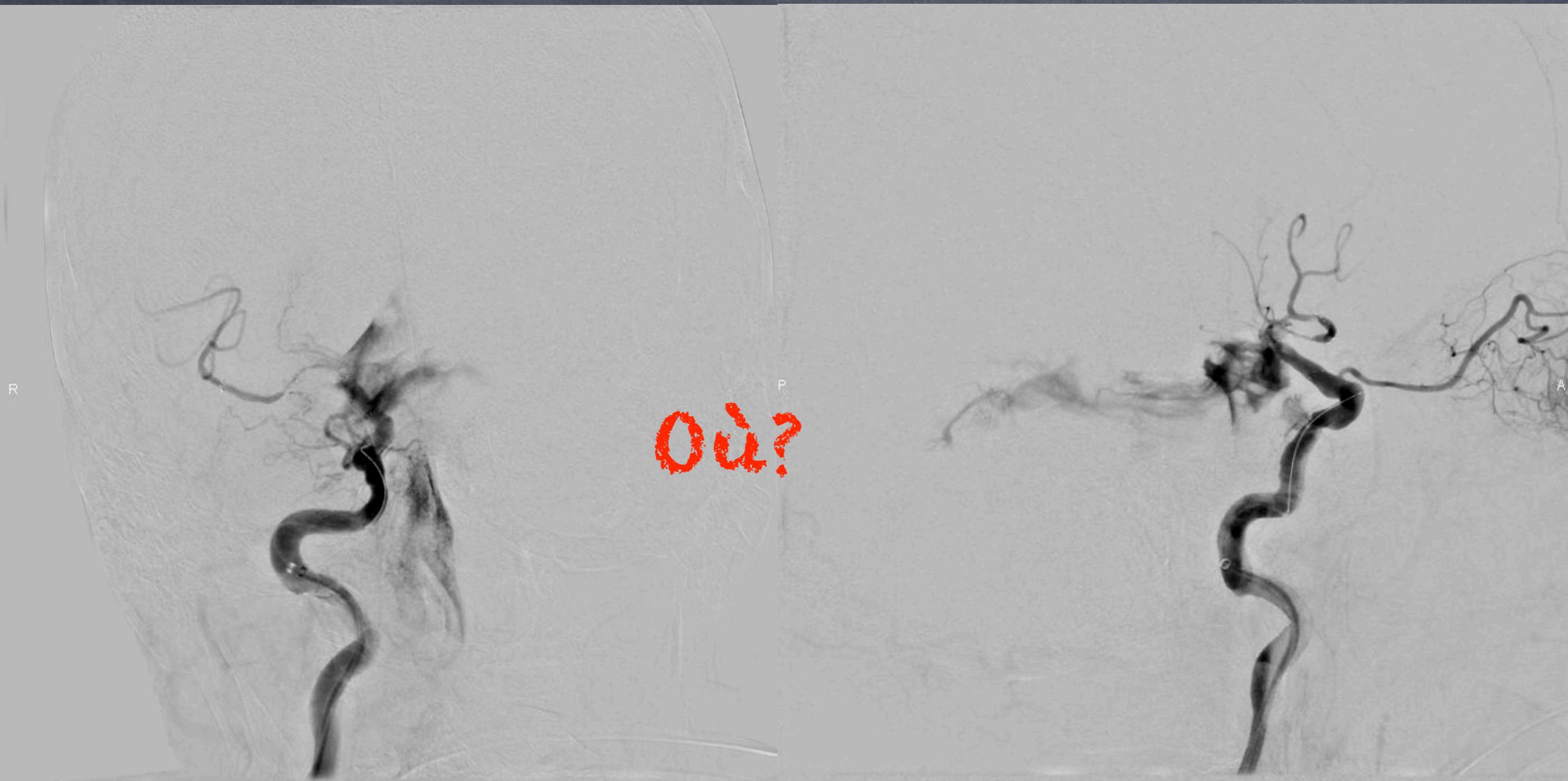
Complication Hémorragique

- Perforation pendant la navigation
- Navigation distale
- Traumatisme stent retriever
- Injection de contraste

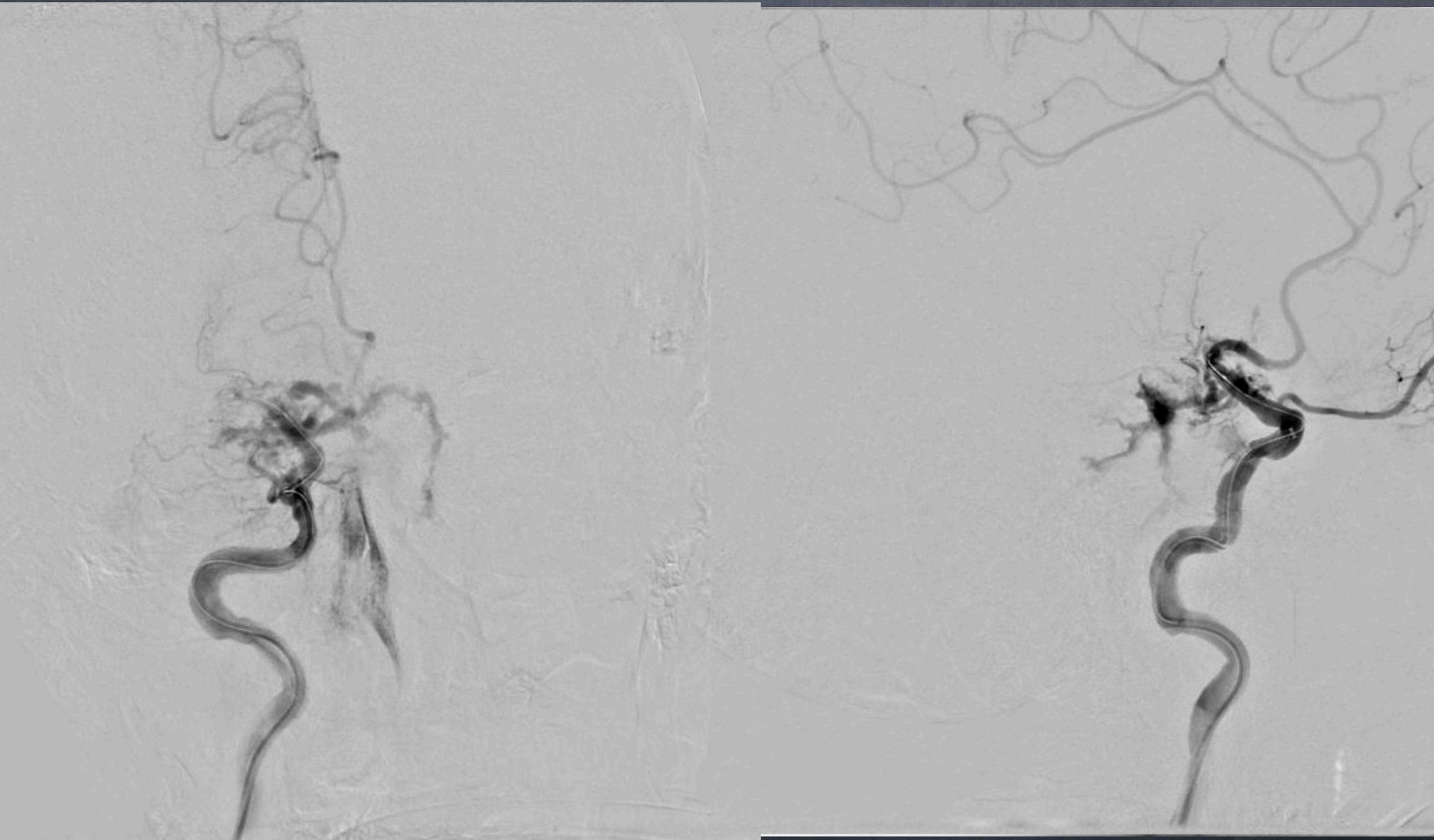




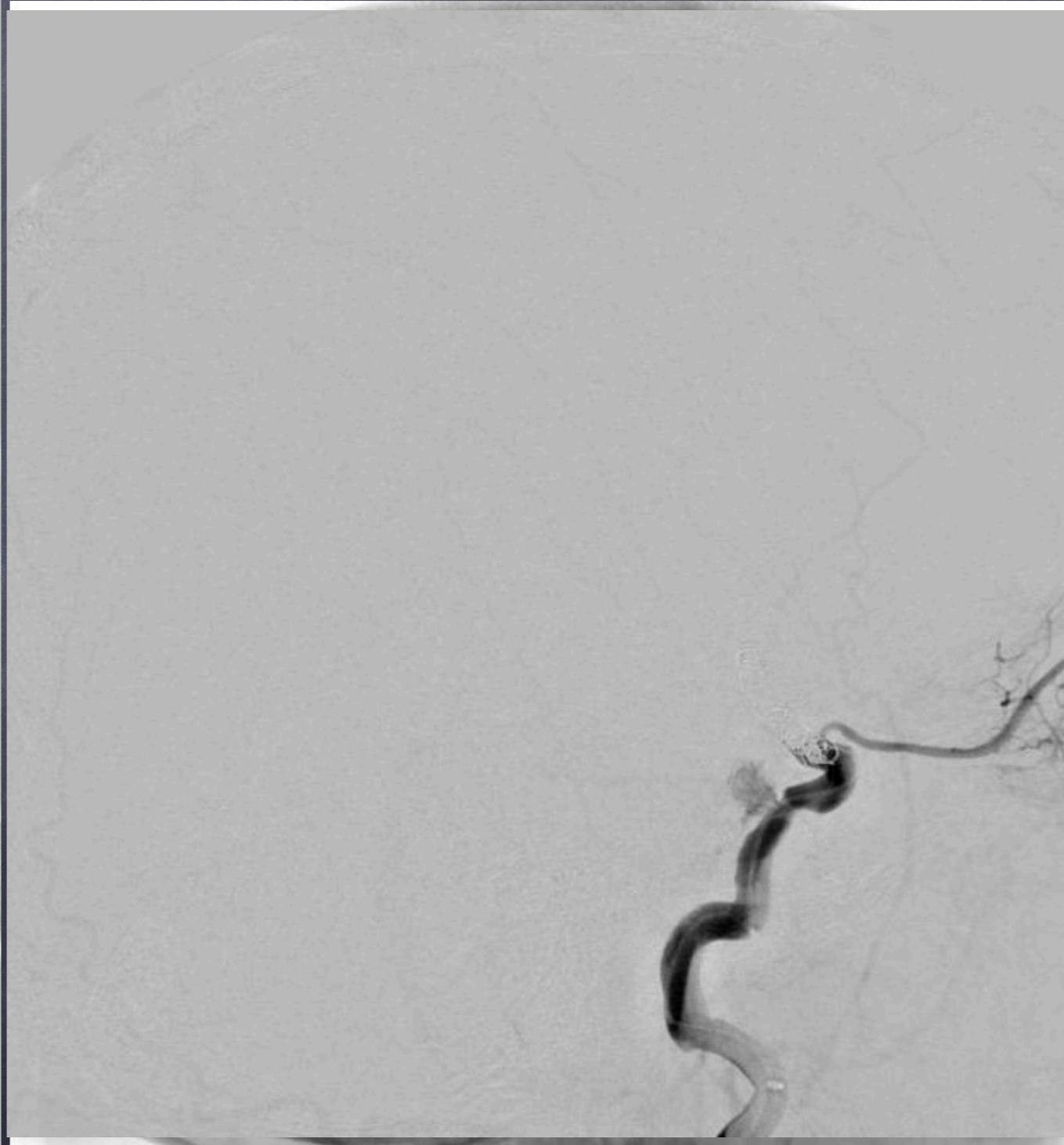
Perforation x Dissection



3 Min



Perforation x ~~Dissection~~

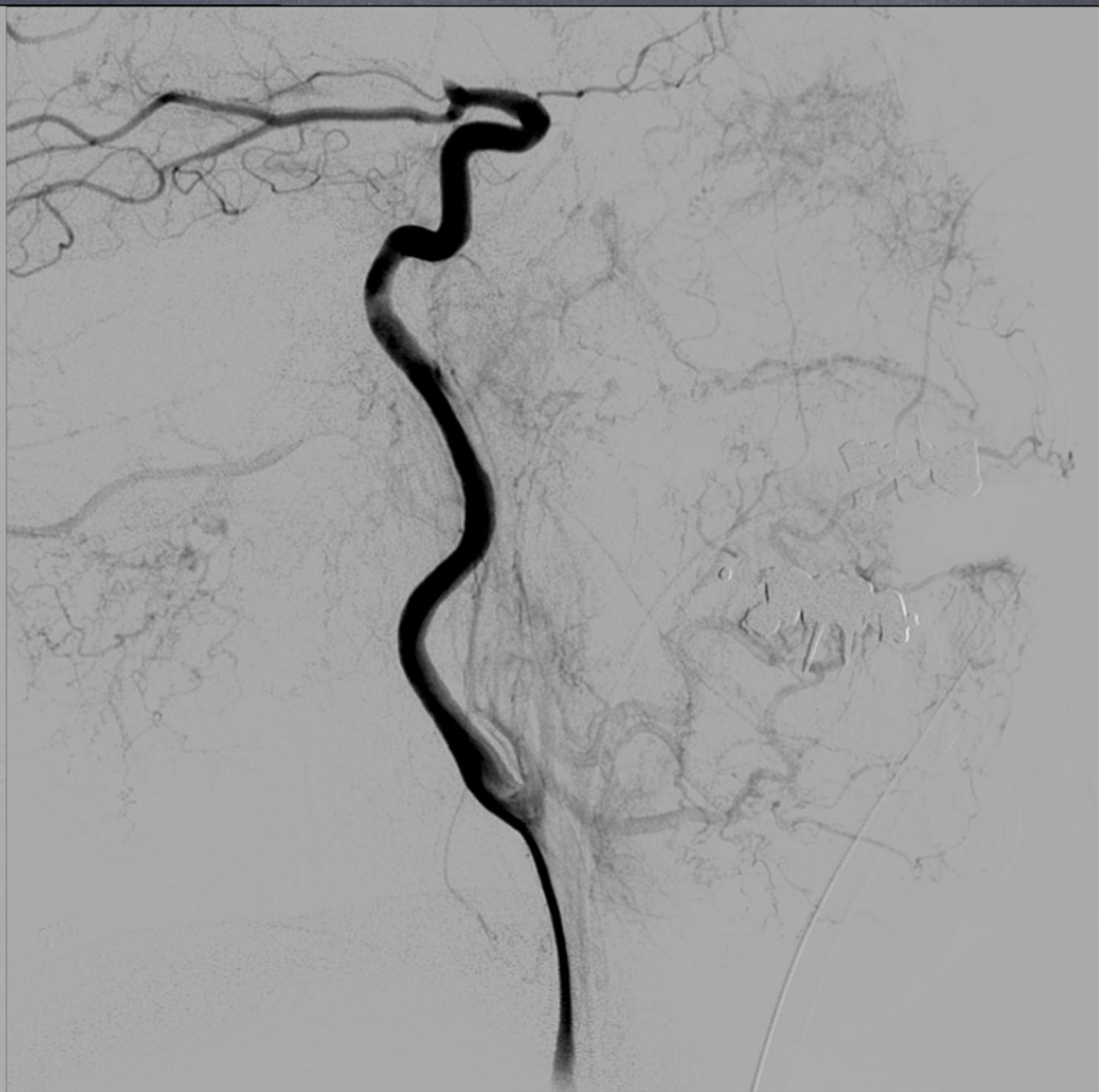




R

L

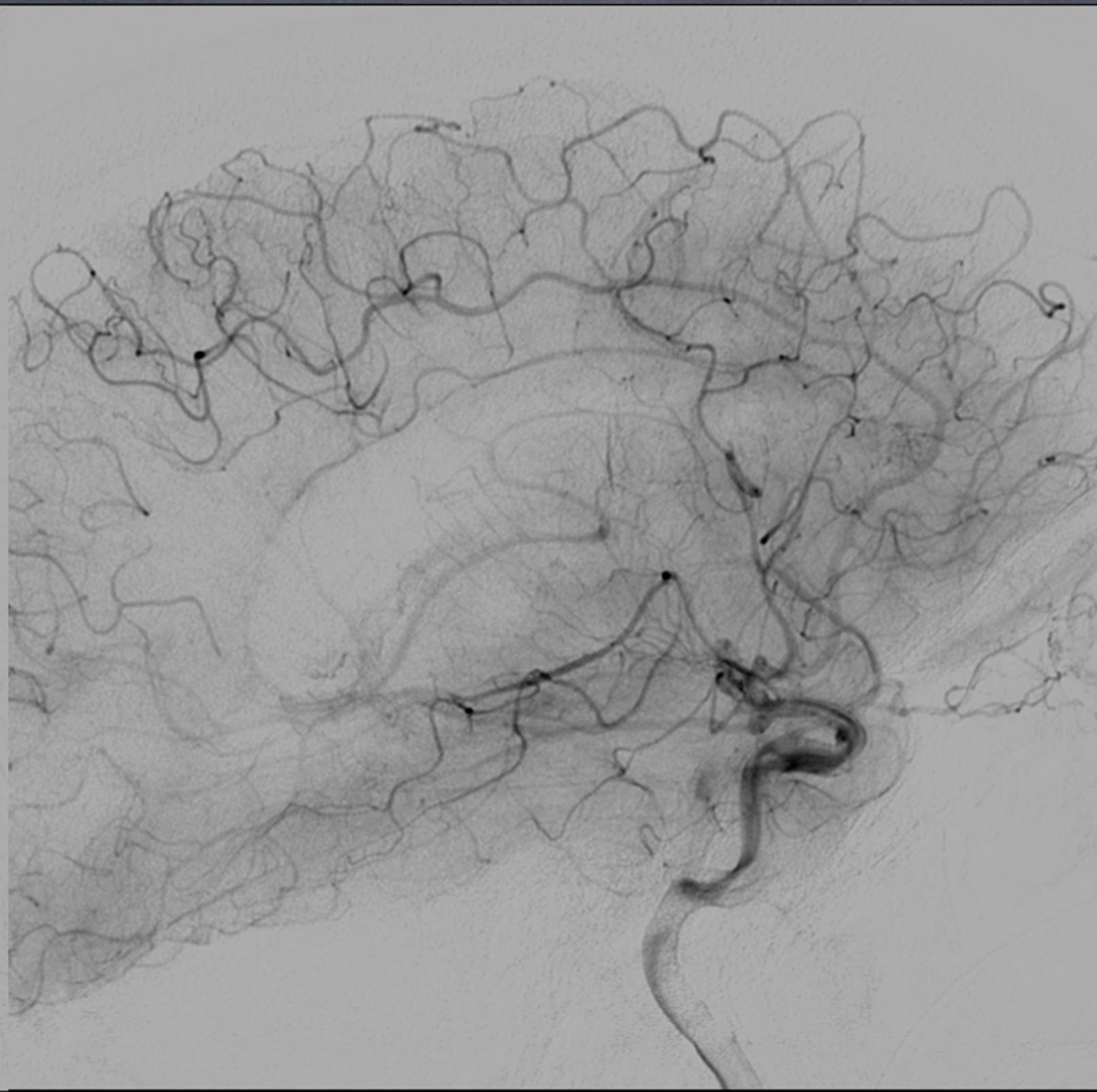
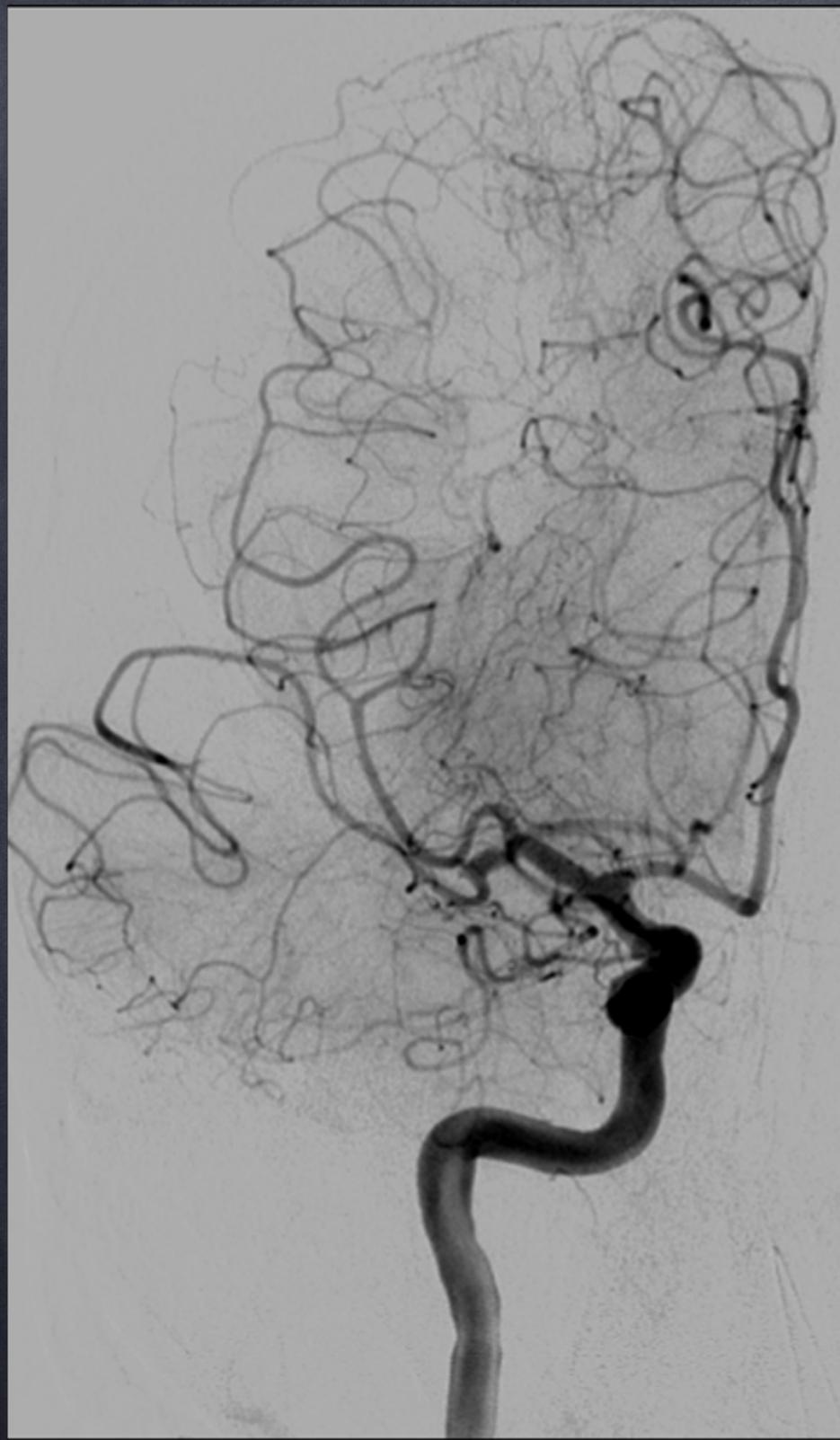
- F, 85 ans
- NIHSS 18, Aspect 6
- Début de thrombolyse IV (9h15) à Brive et transport sur Limoges
- Arrivée au CHU à 10h30, pas de récupération clinique, bloc NRI







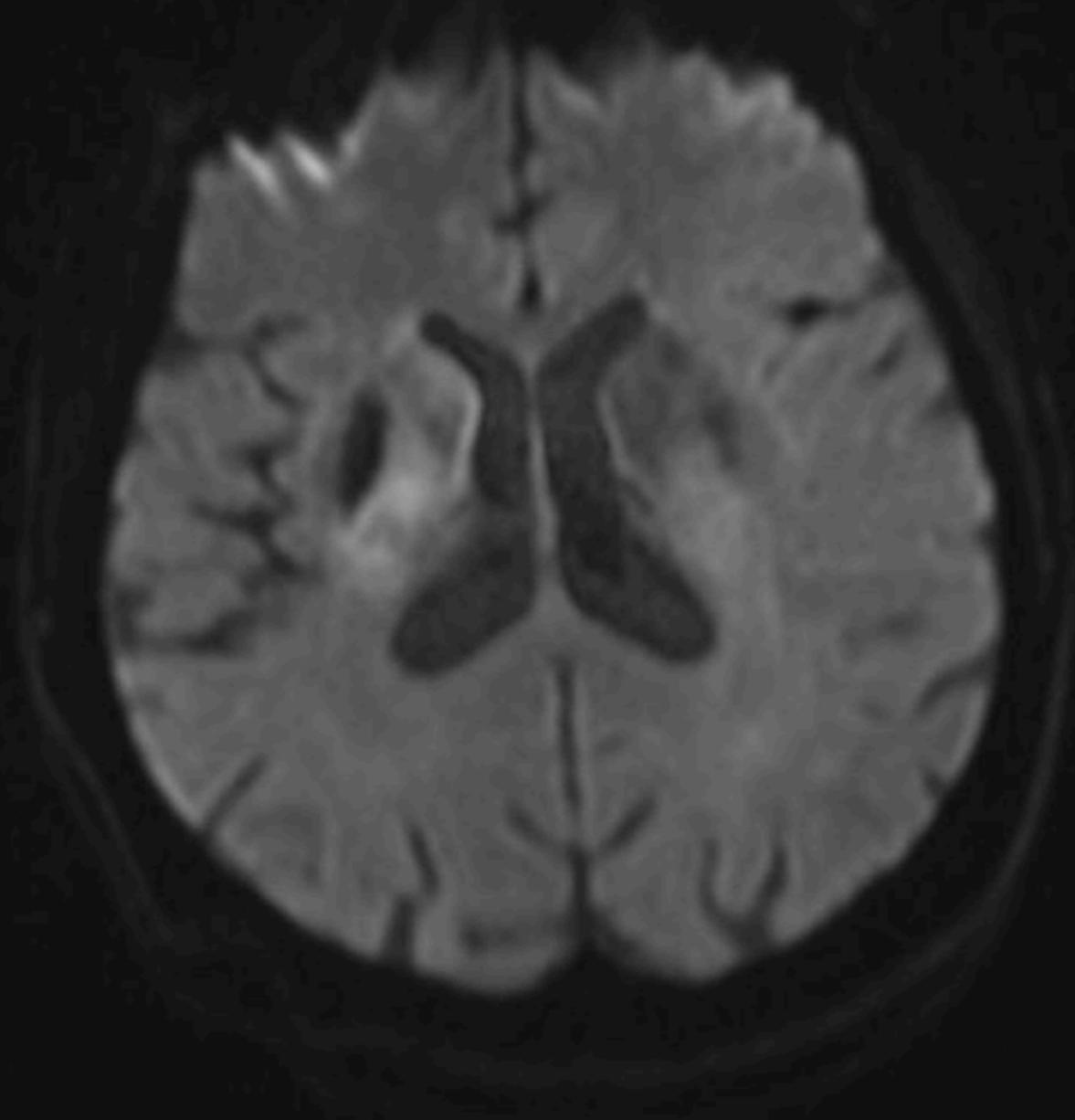




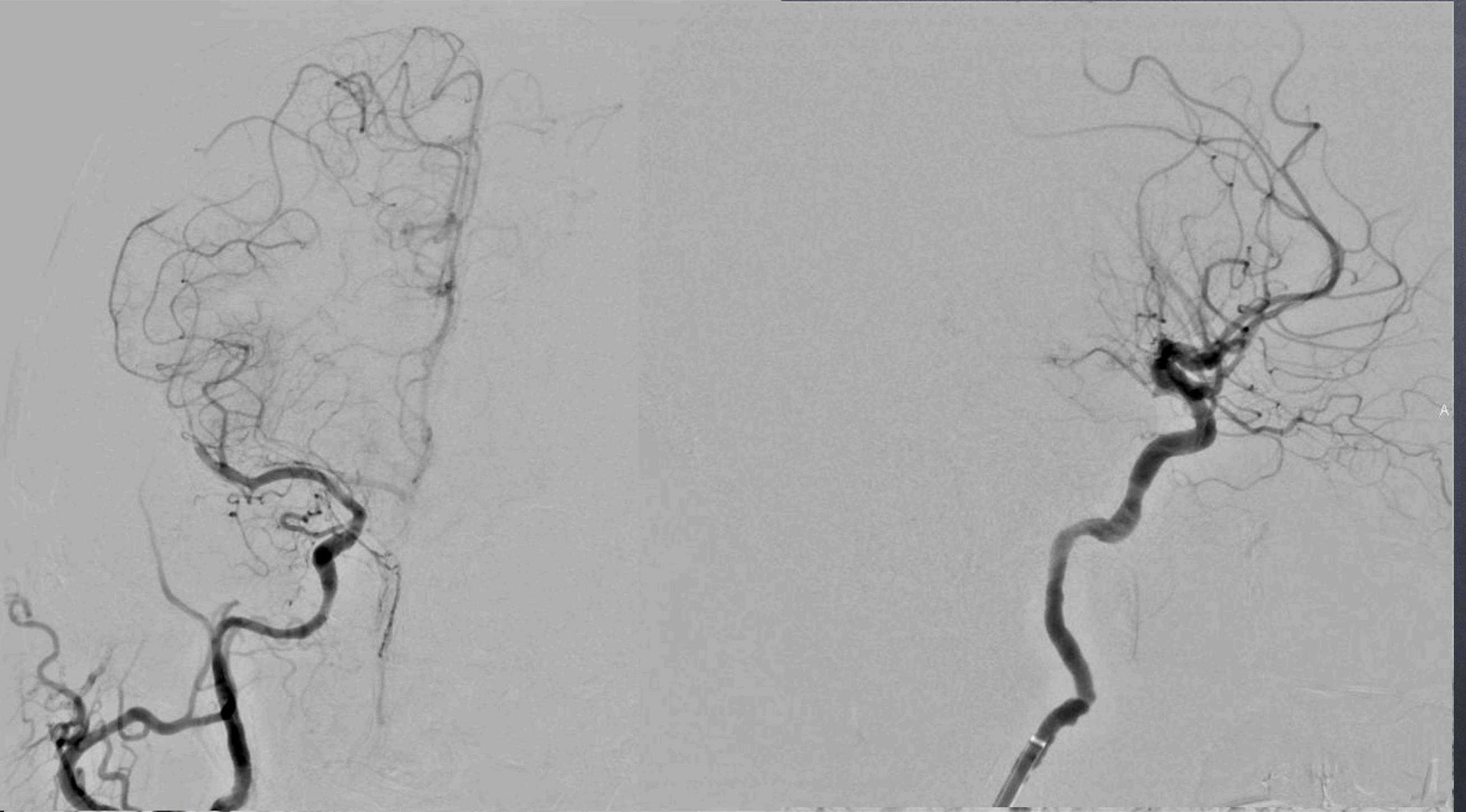
02



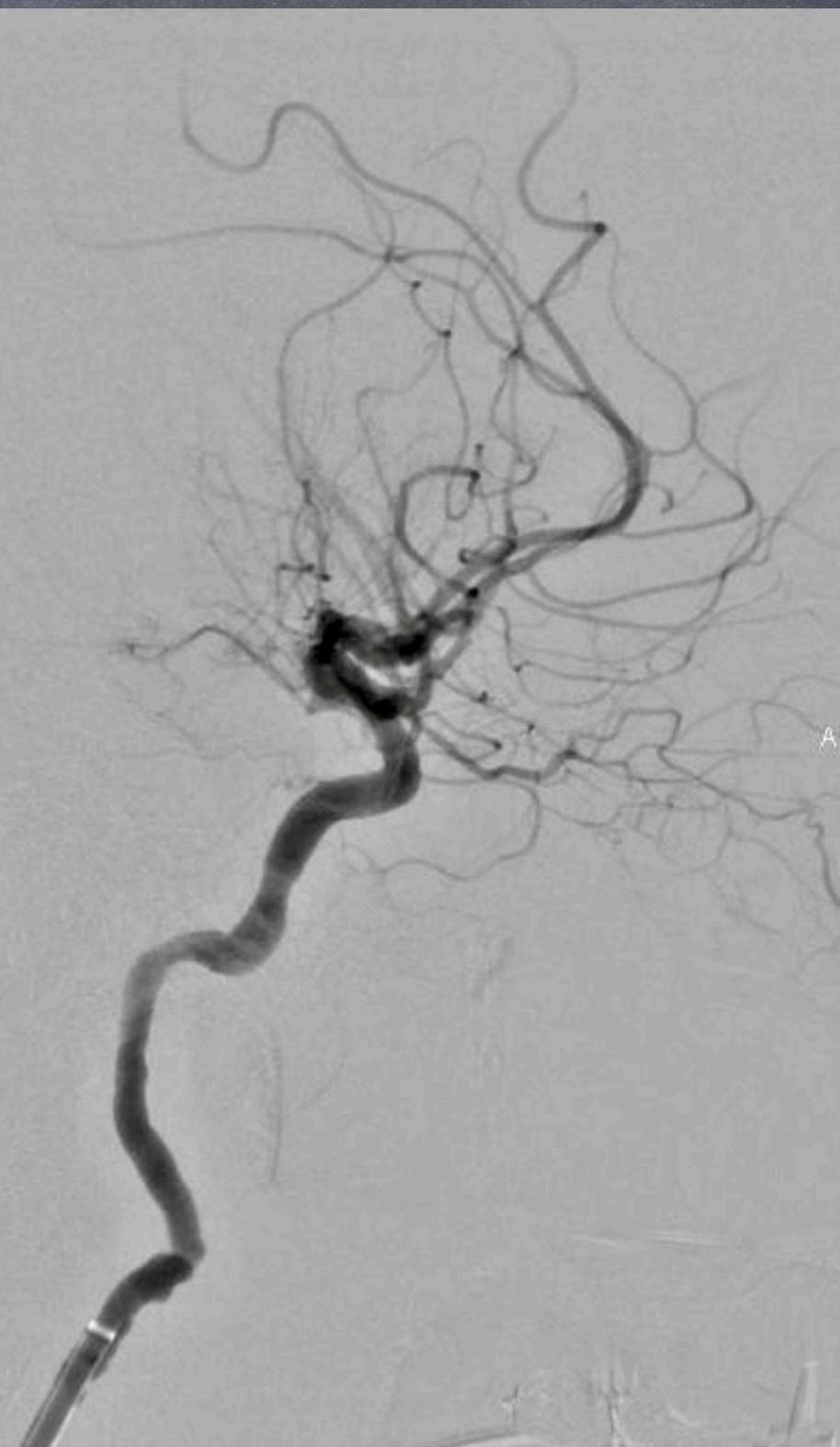
P



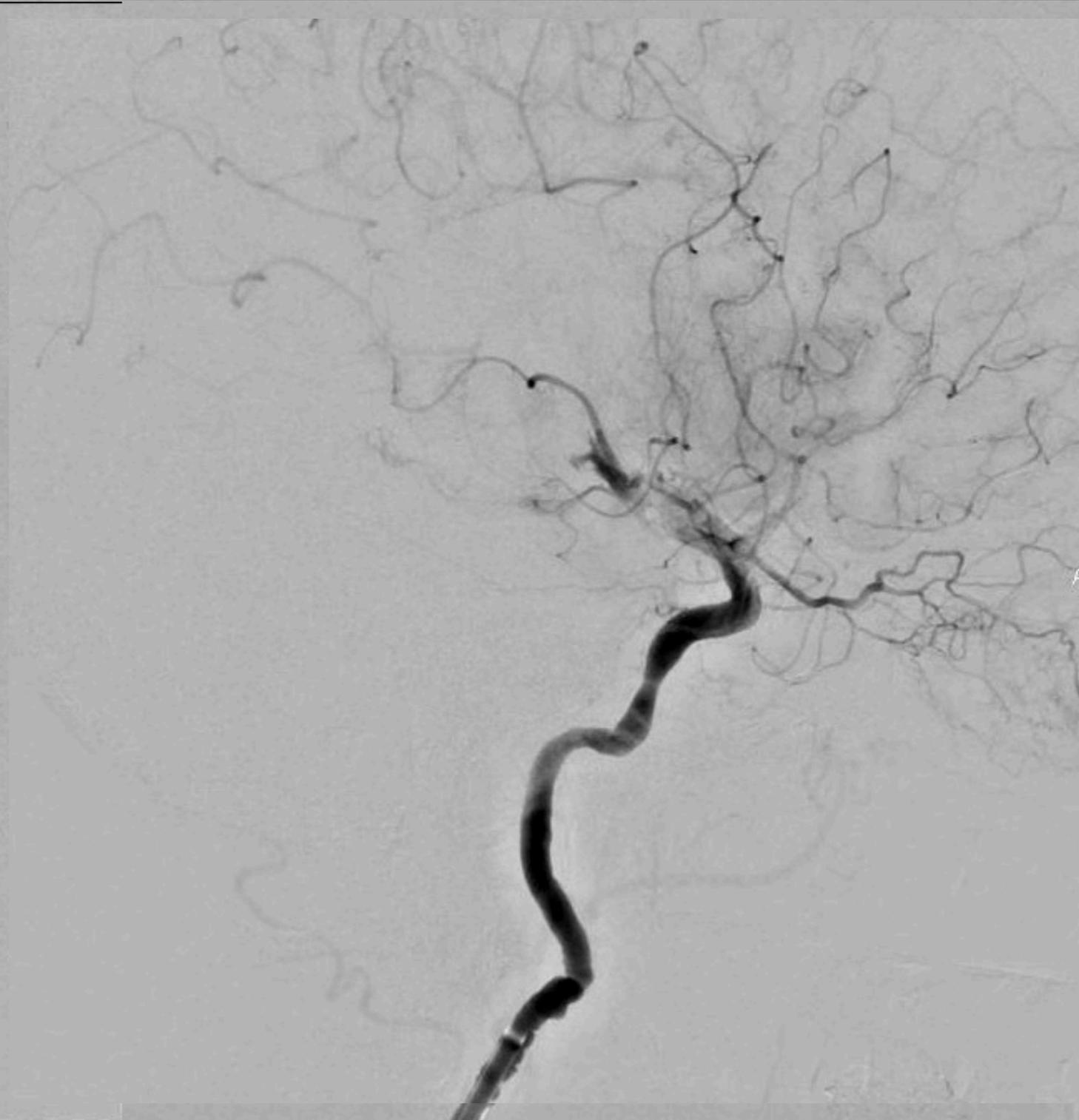
1er Passage

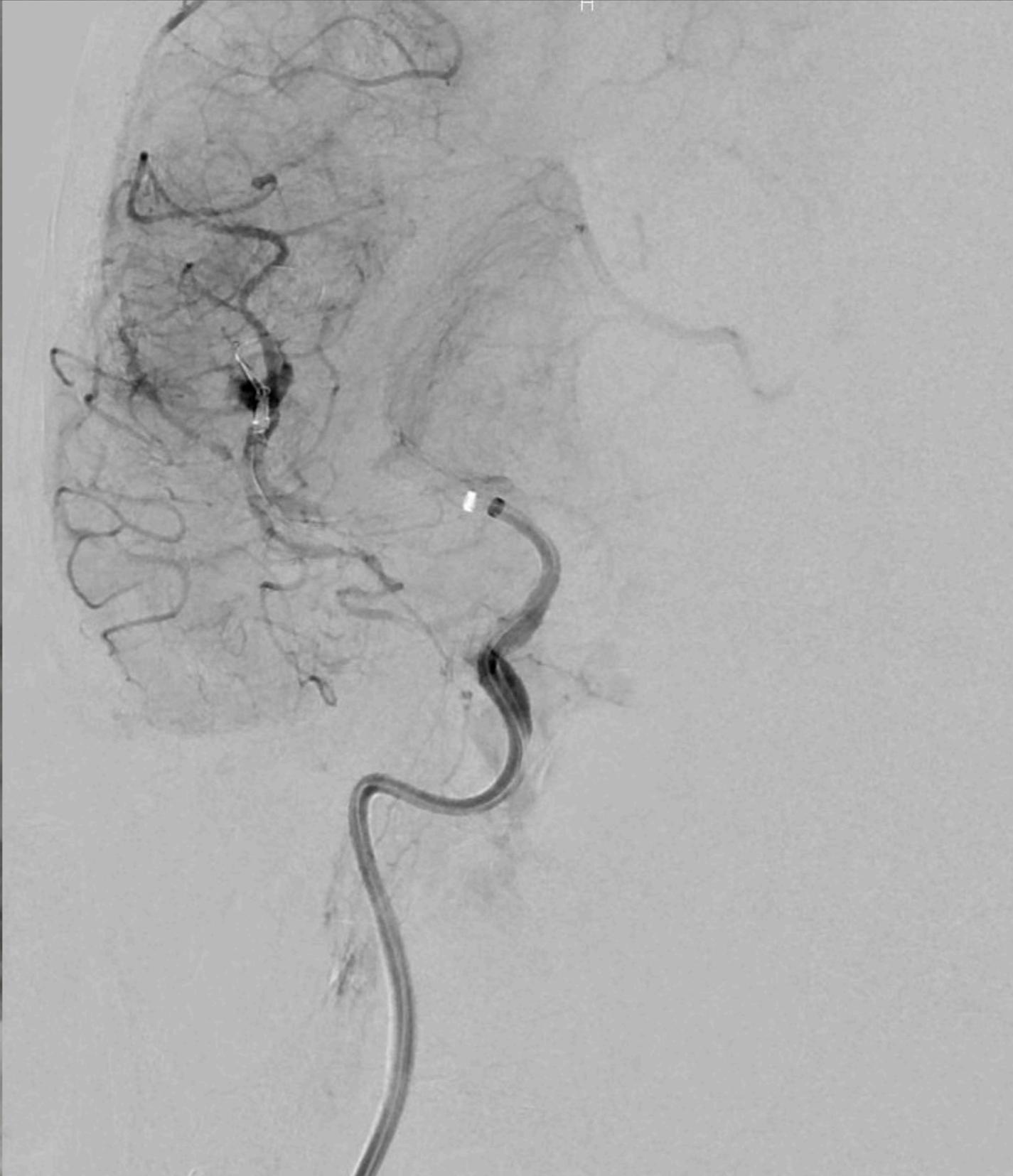


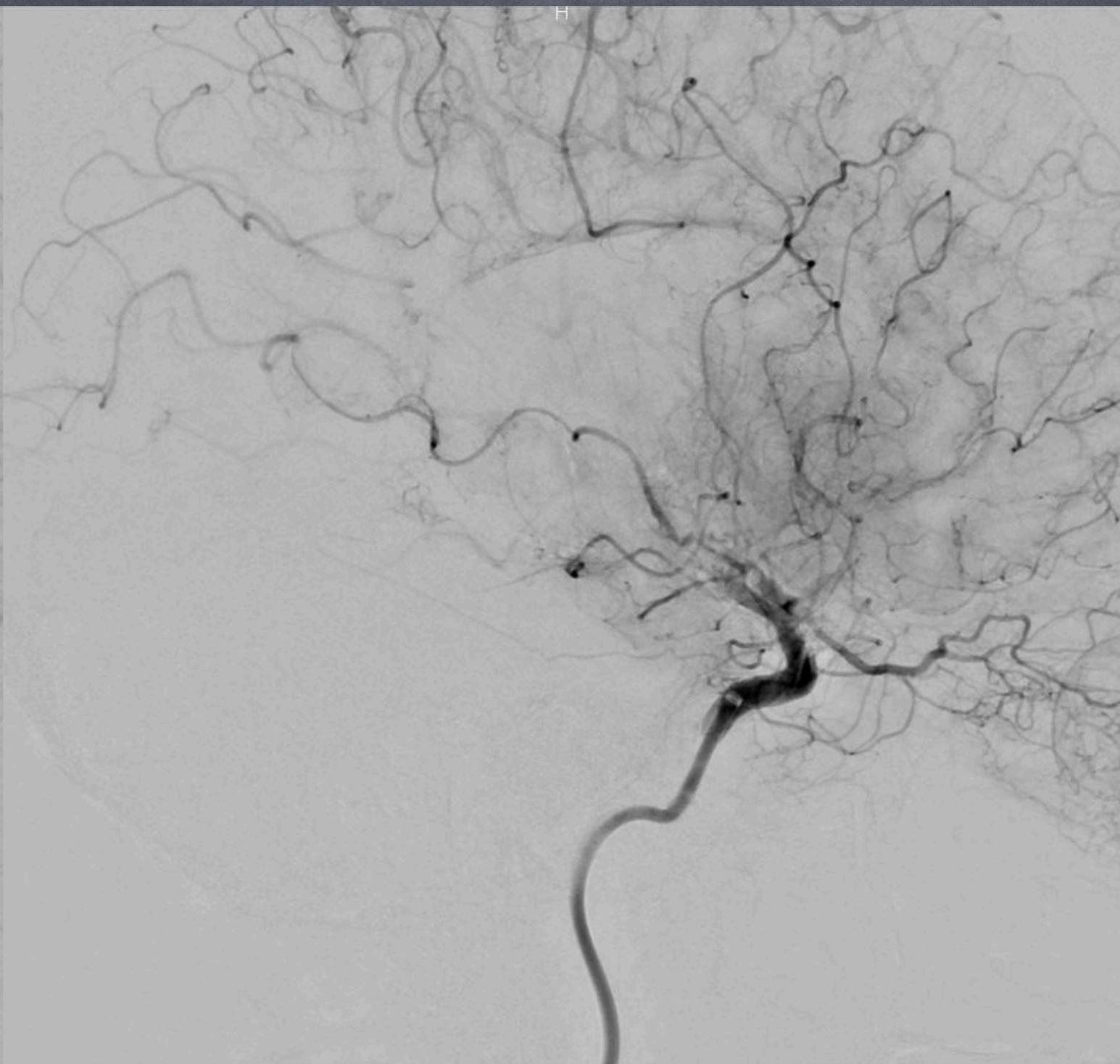
2ème Passage



3ème Passage





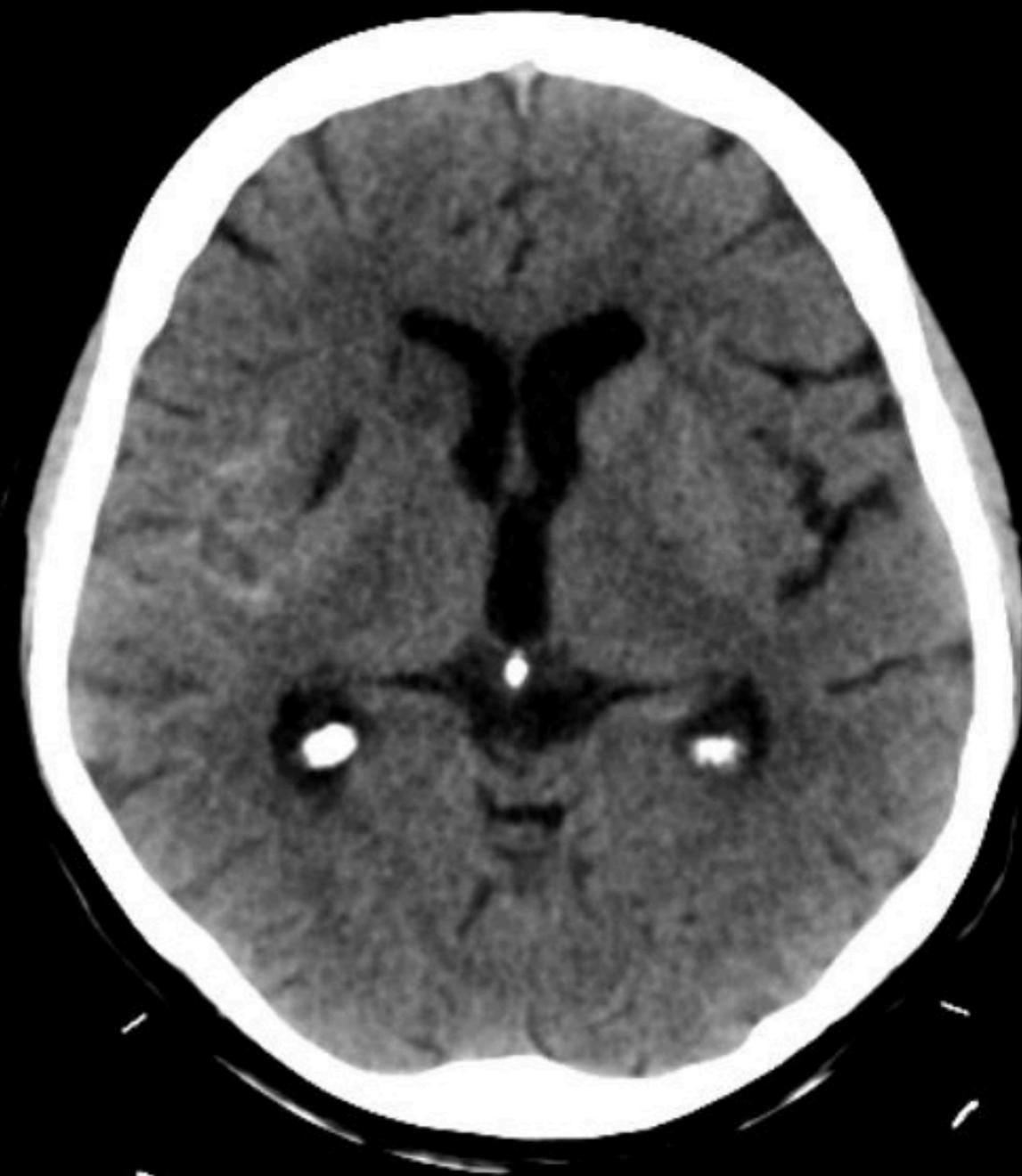


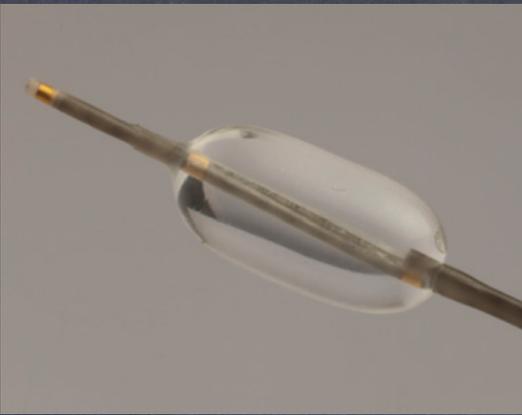
01

05



R





Ballon

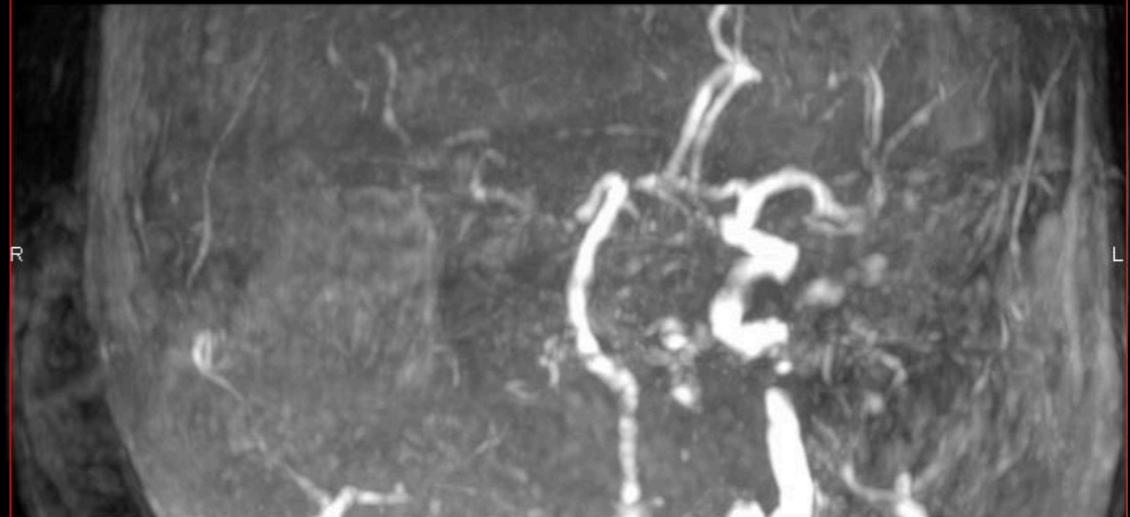
- Assure l'occlusion contrôlée de l'artère
- Temps de préparation
- Temps de navigation



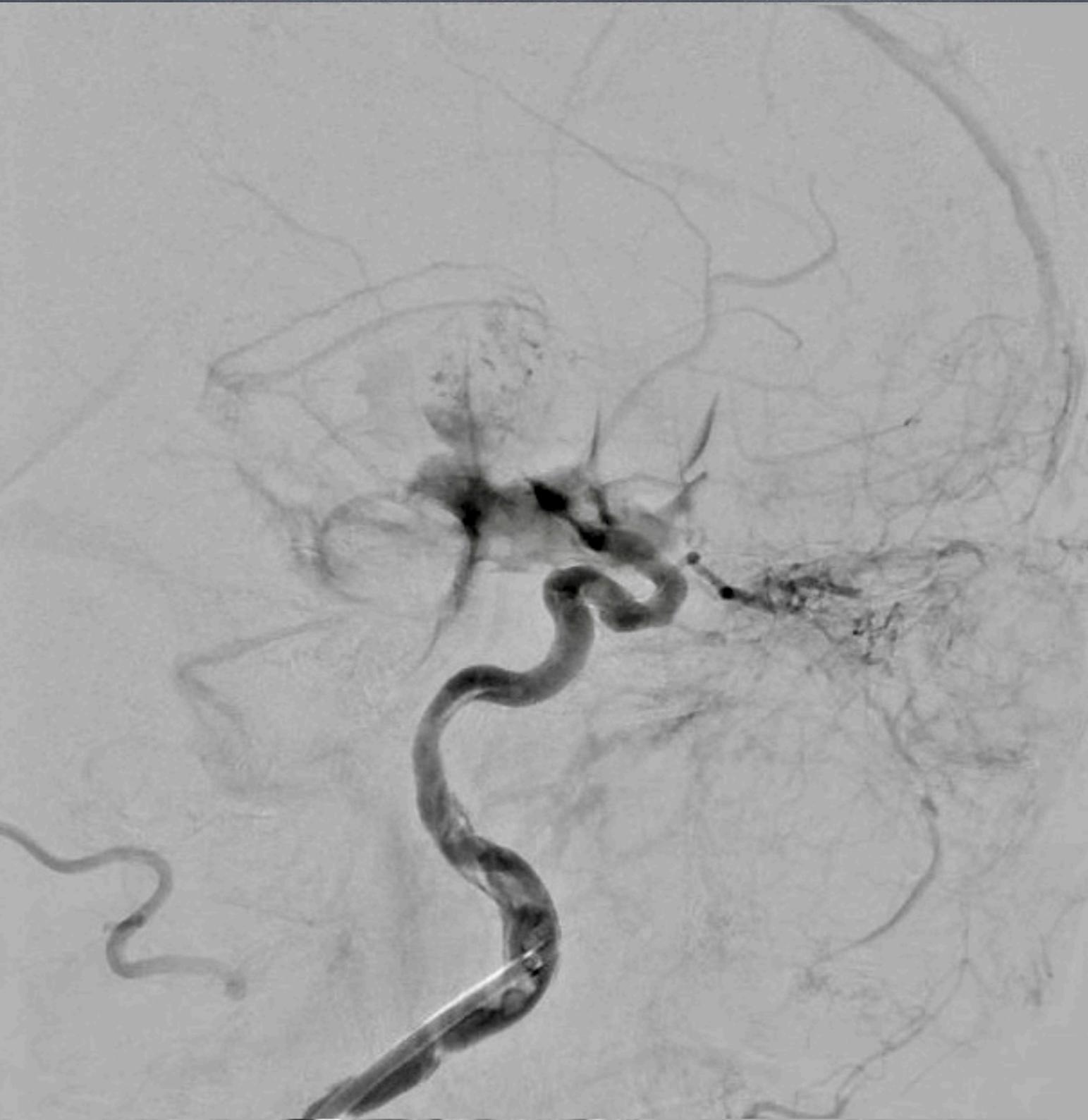
Coils

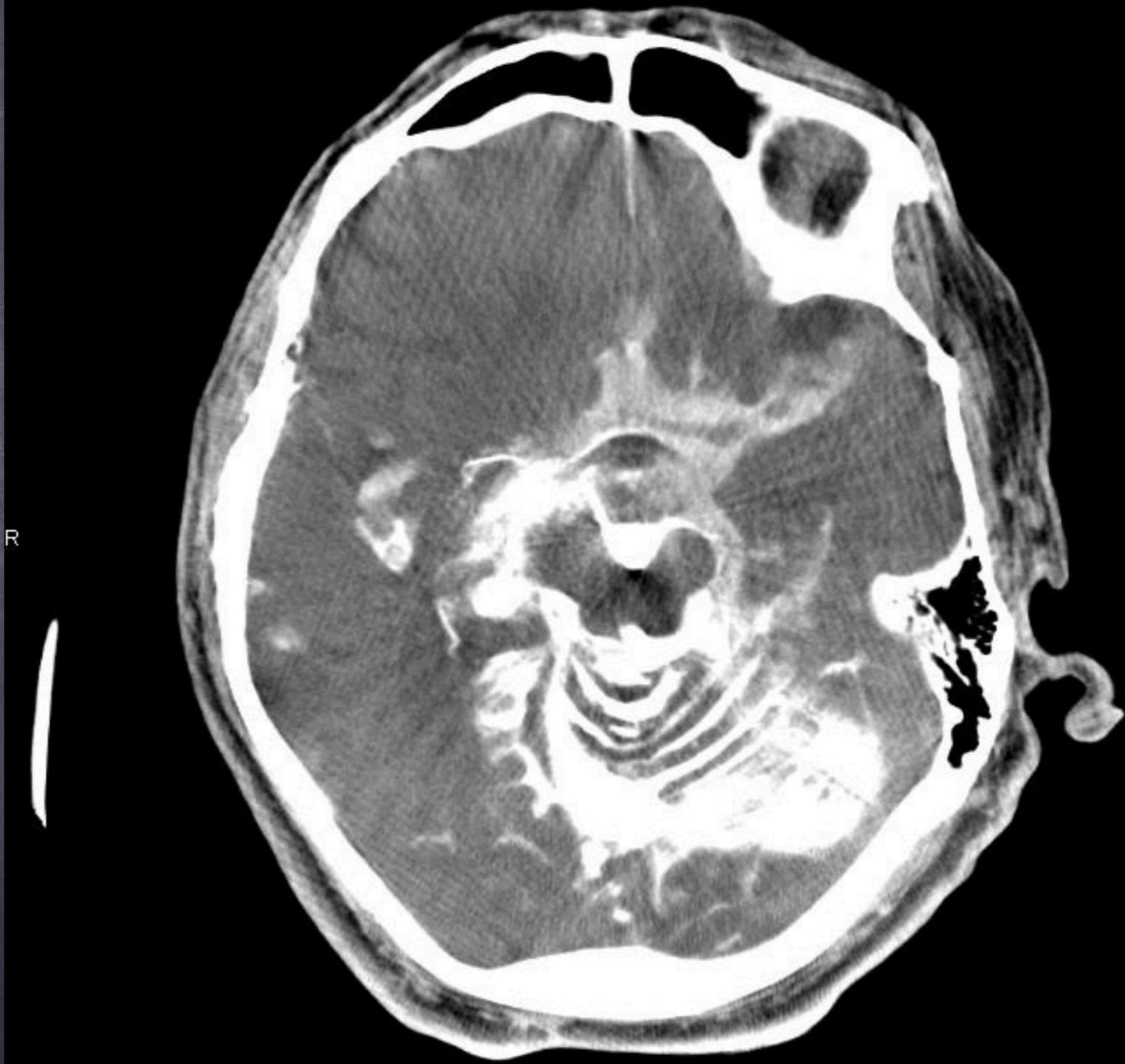
- Rapide
- Branches distales
- Occlusion incomplète
- Stretching

A NE PAS OUBLIER







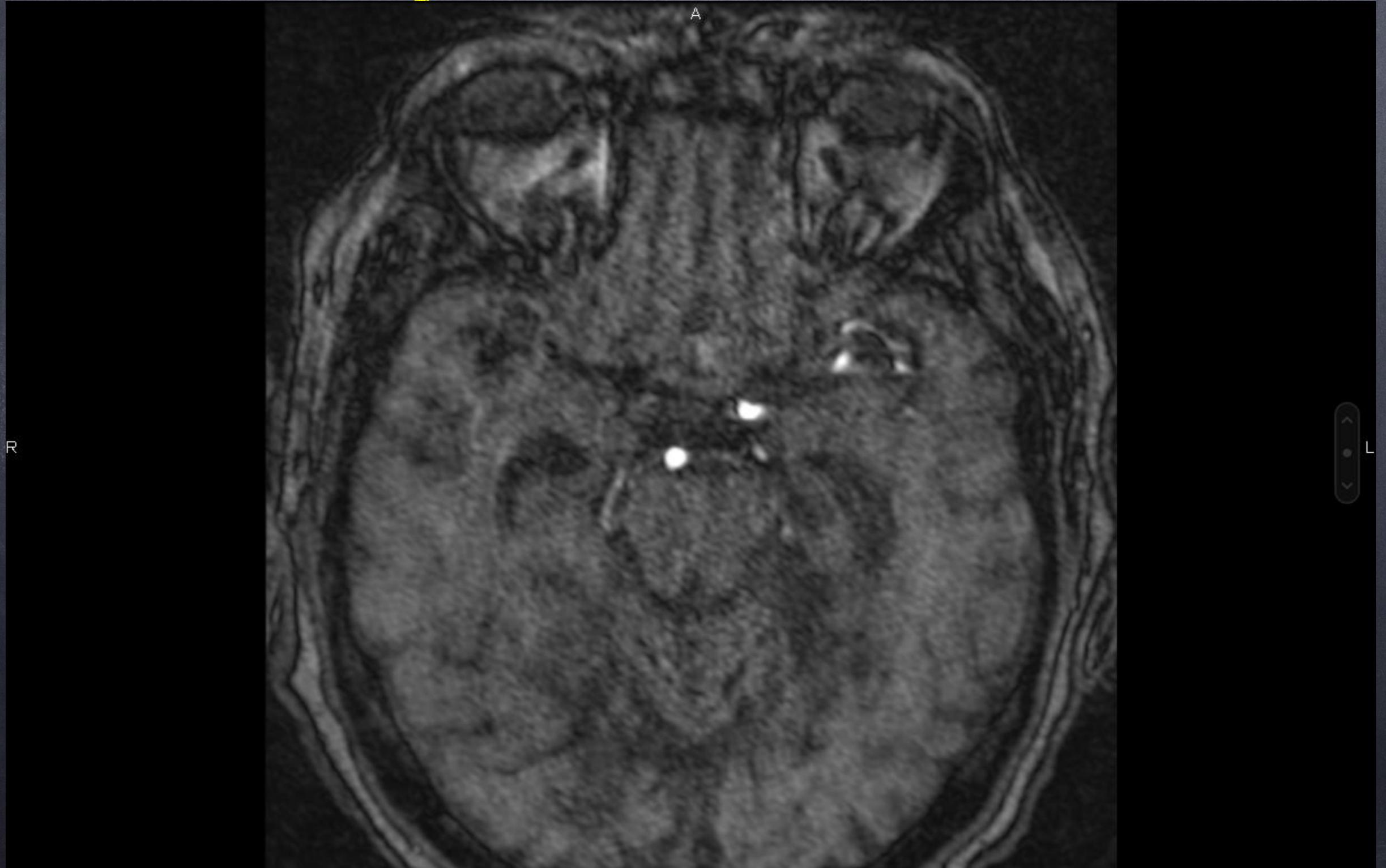


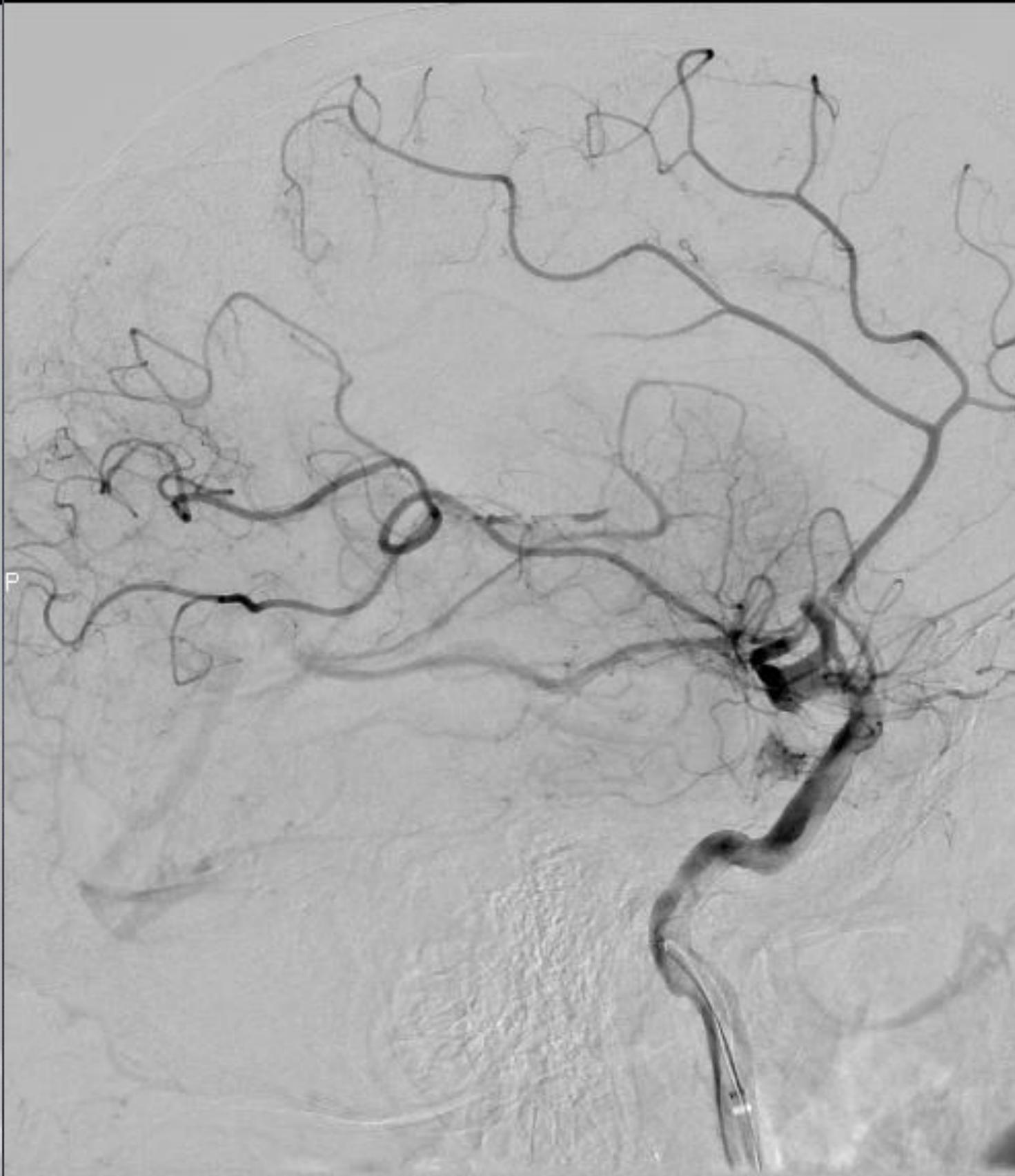
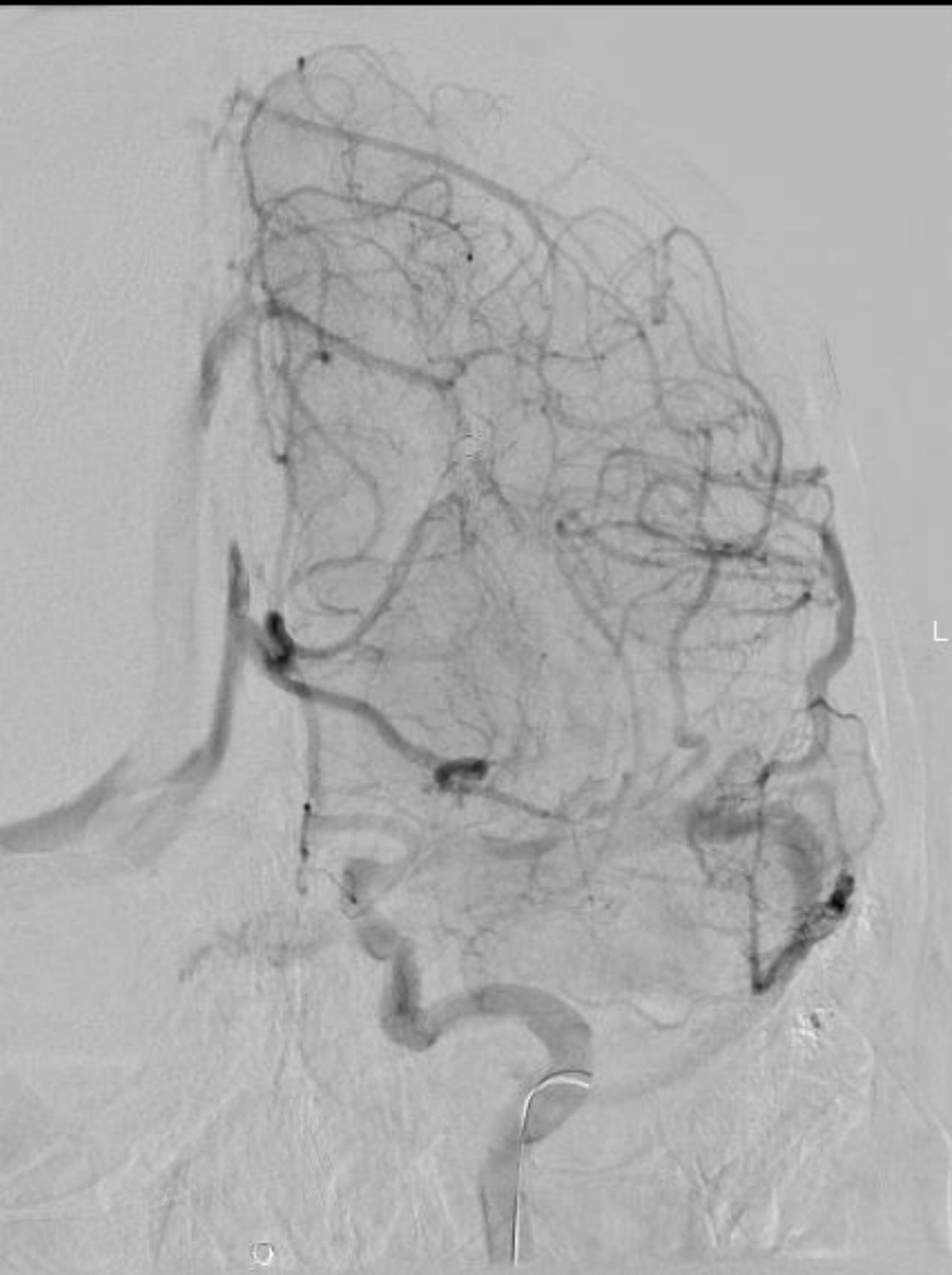
Complication Ischémique

- Fragmentation distale du thrombus:
 - Après thrombolyse IV
 - Pendant navigation
 - Pendant retrait
- Migration d'embolies dans des nouveaux territoires:
 - Pendant retrait

Fragmentation

- Thrombolysse IV





Fragmentation

• Cathéterisme



Fragmentation

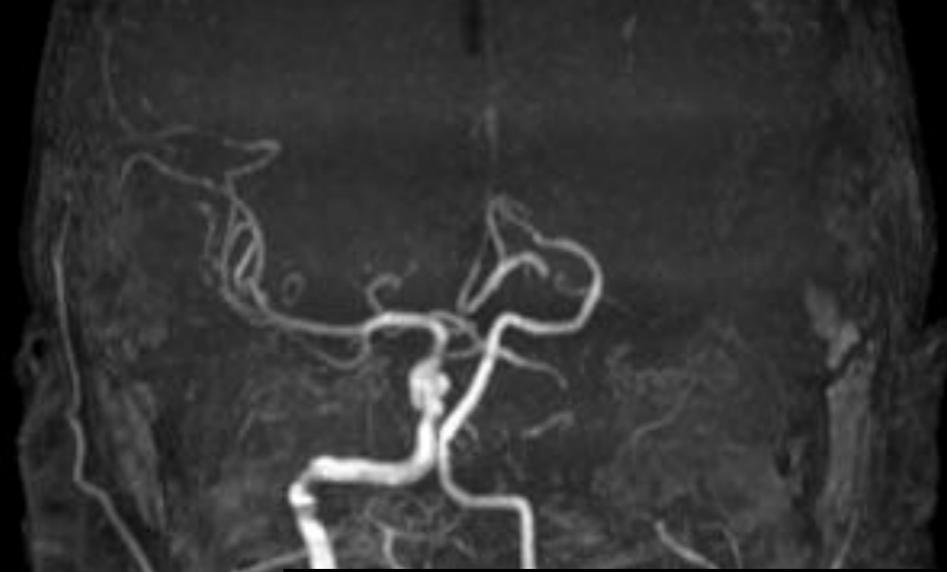
- Retrait du caillot



- M, 85 ans
- Hospitalisé en Cardio pour problème de rythme, anti-coagulant
- Déficit brutal de l'hémicorps gauche à 12:30
- NIHSS 26

IRM
13:40

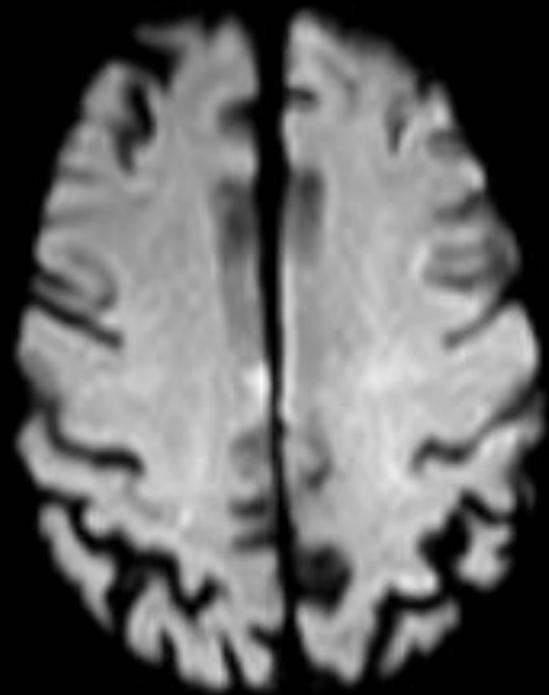
R



L

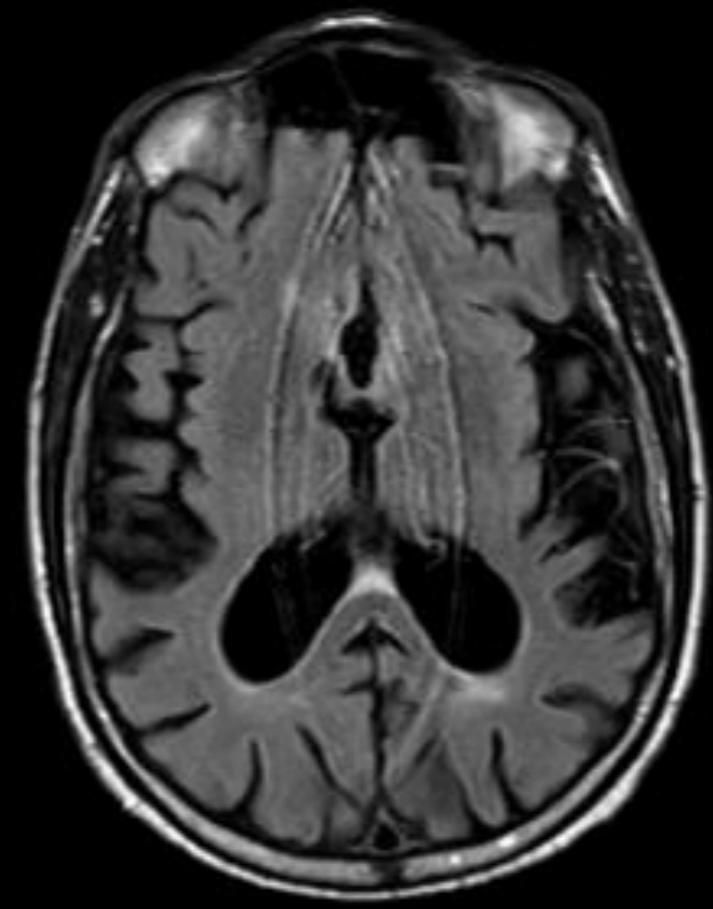
A

A



R

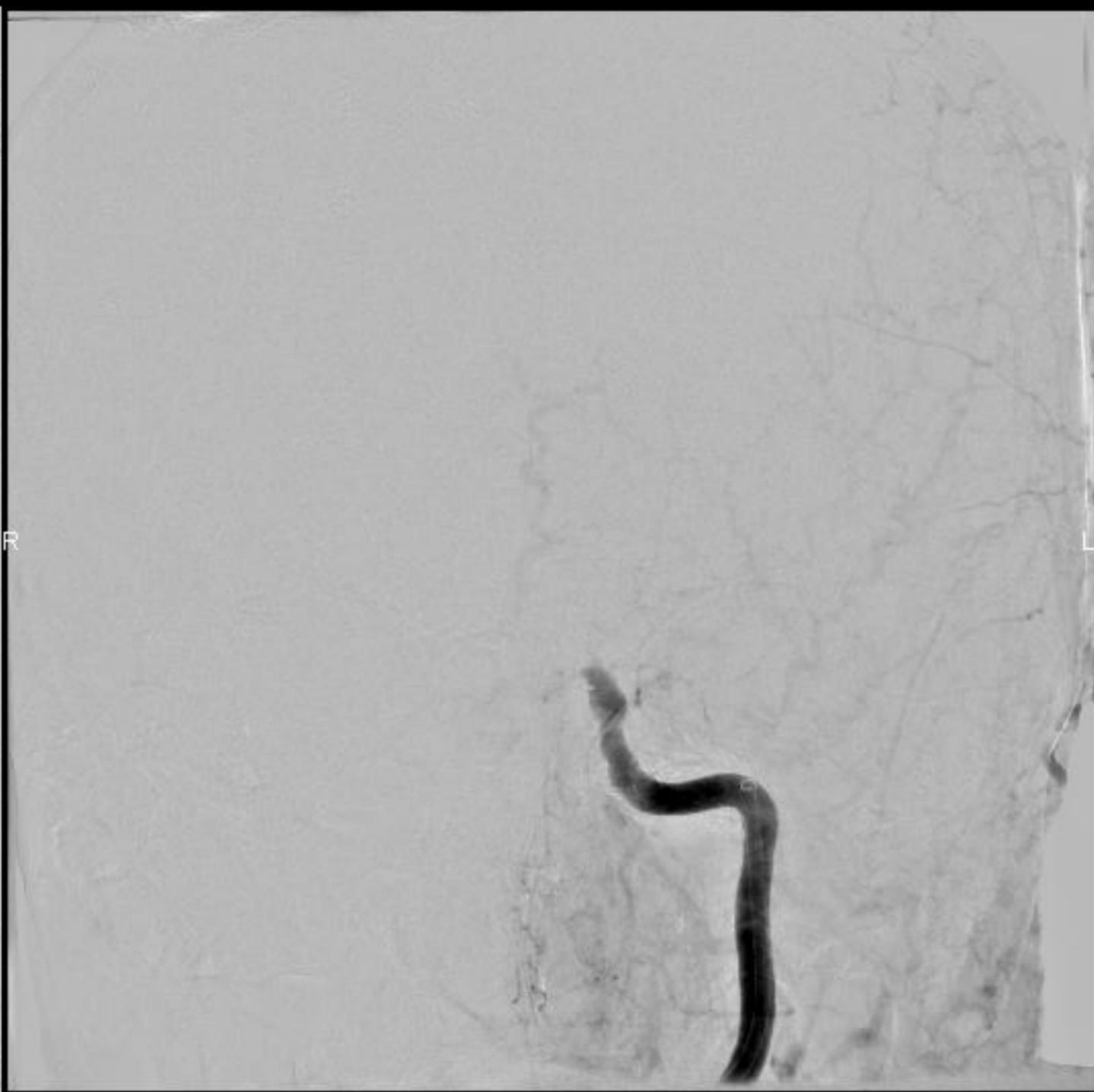
P



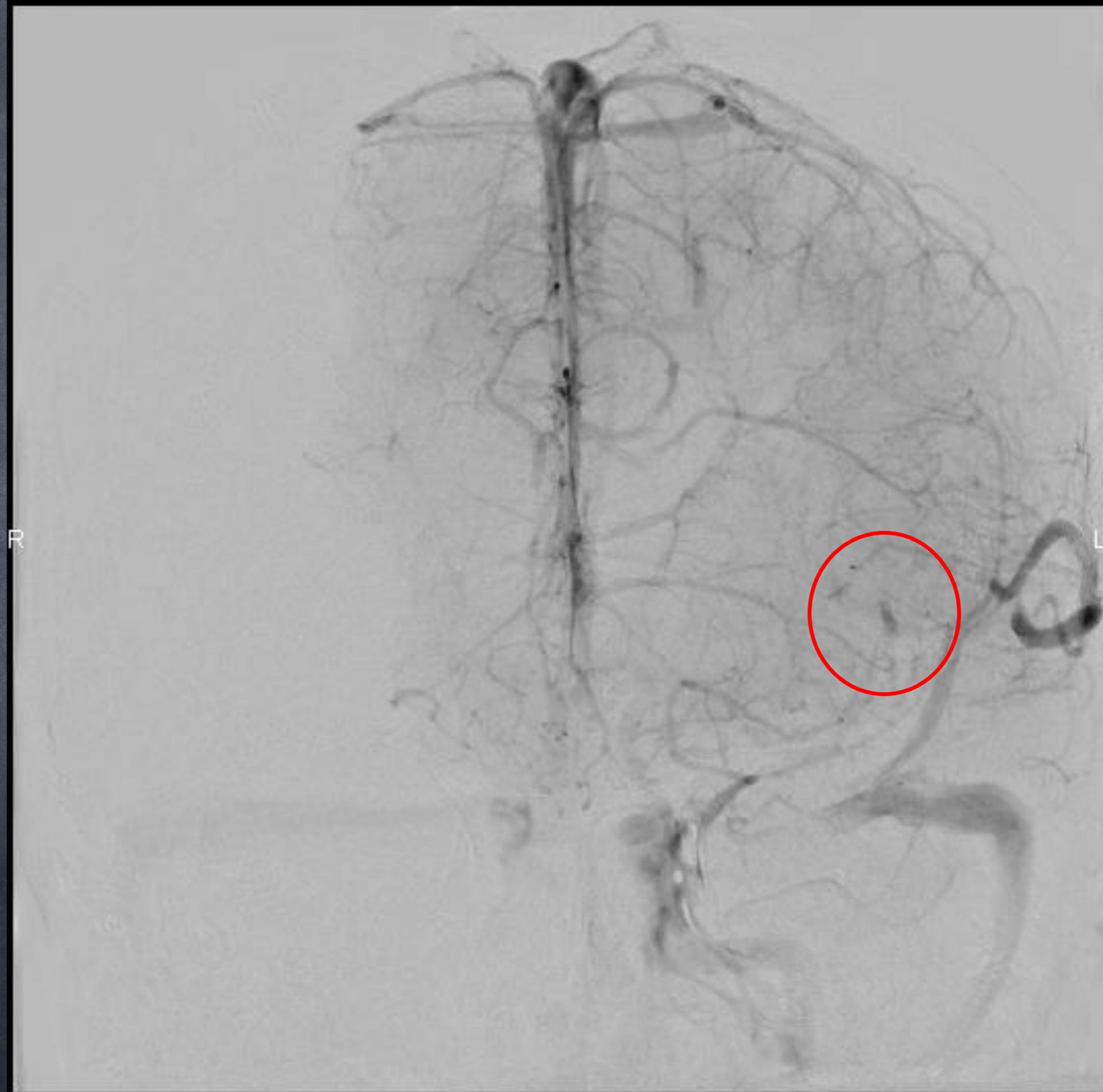
P

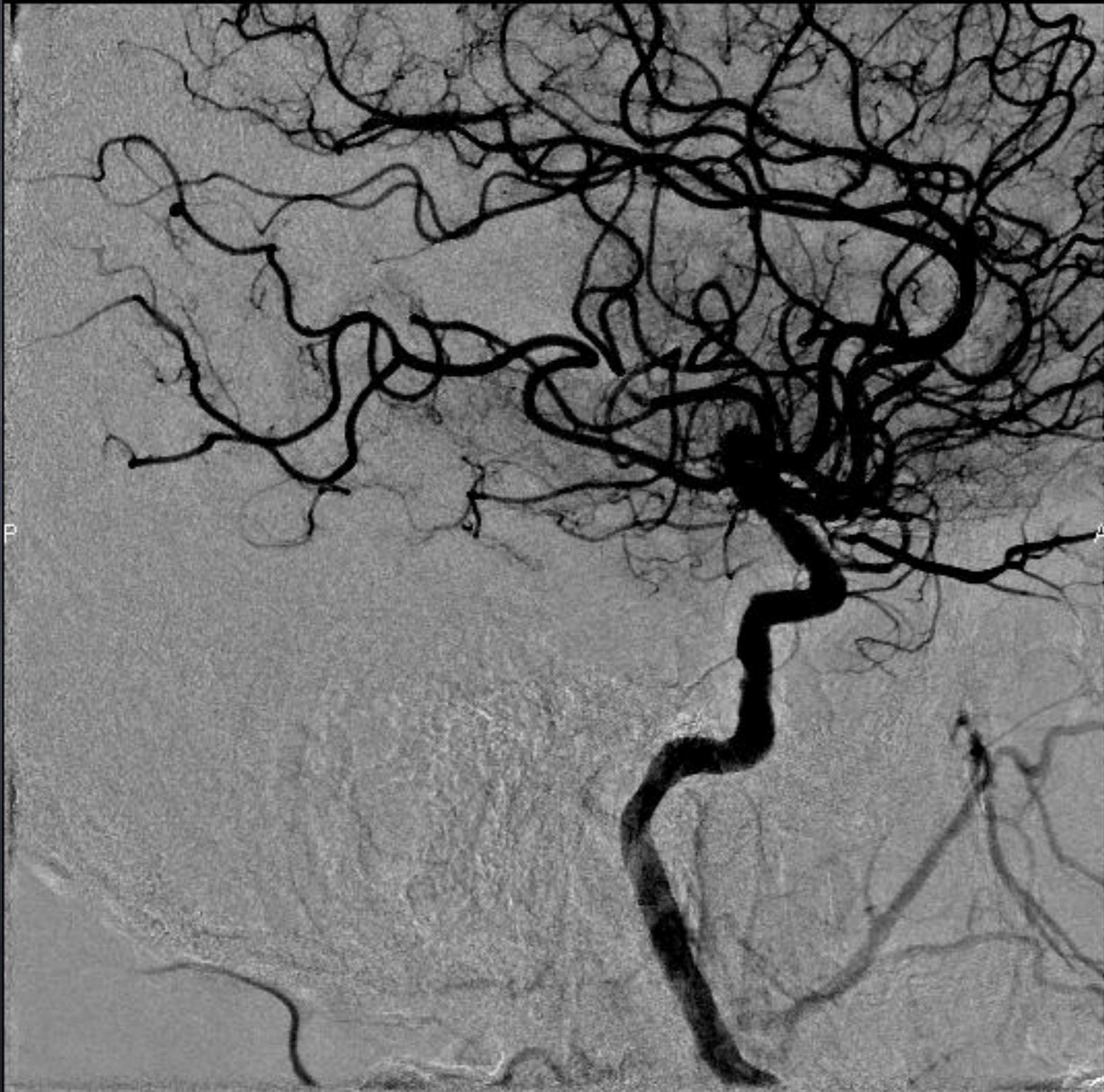
ASPECT 9

Bloc NRI 14:00

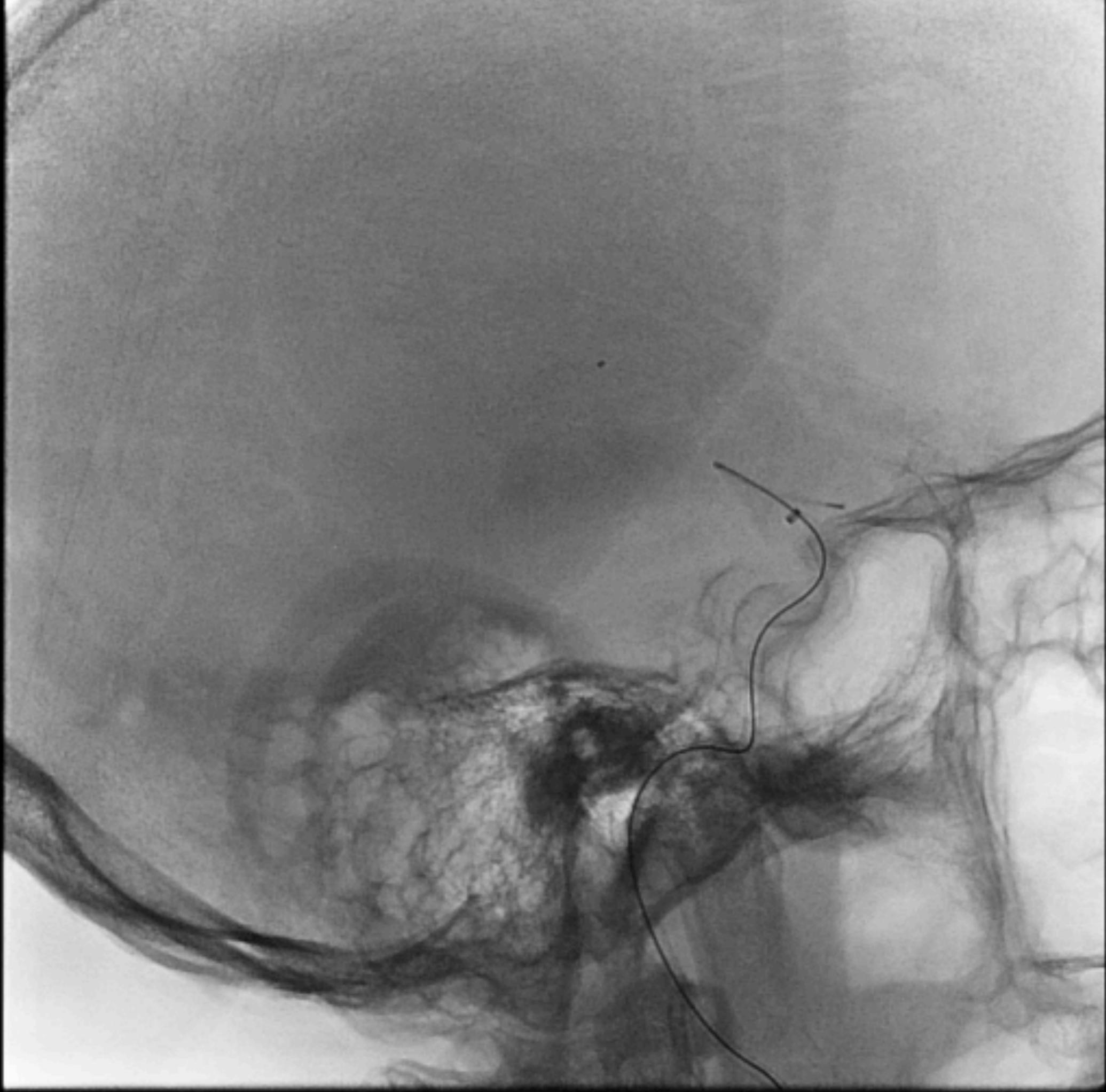


Sofia +
Velocity
Solitaire 6x40

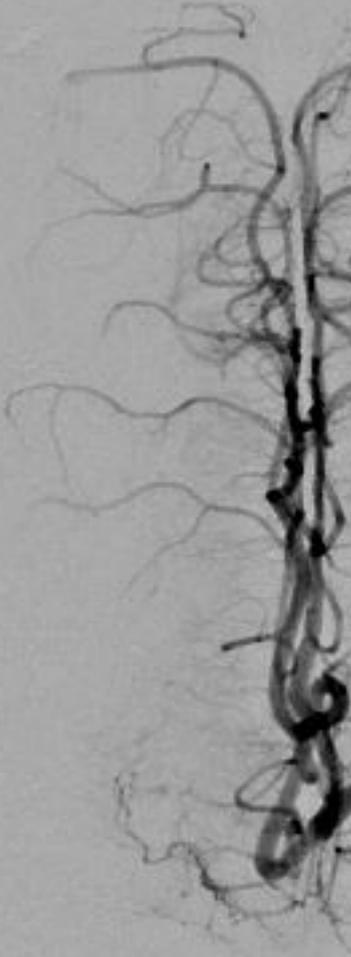




Sofia +
Velocity
Eric 3x20



A

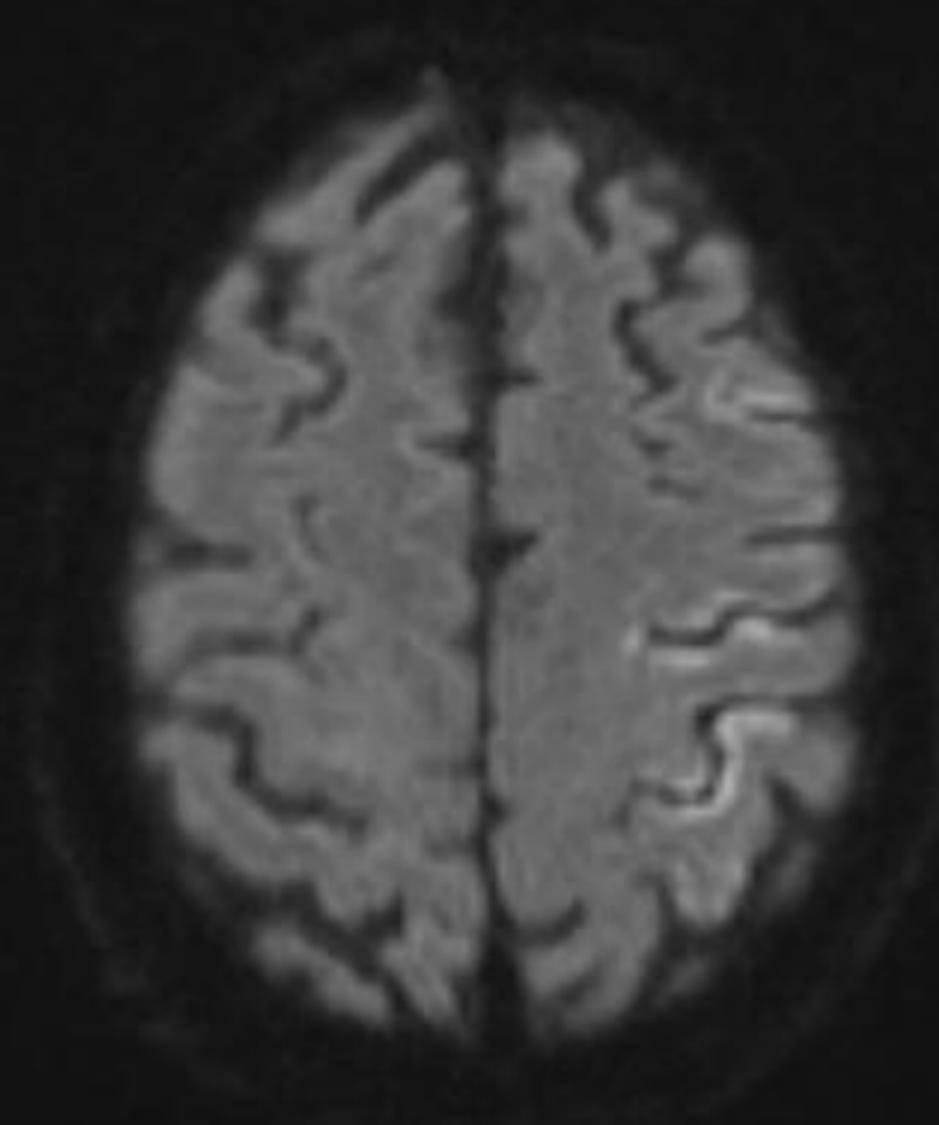


F

NIHSS 24H

8

R



L

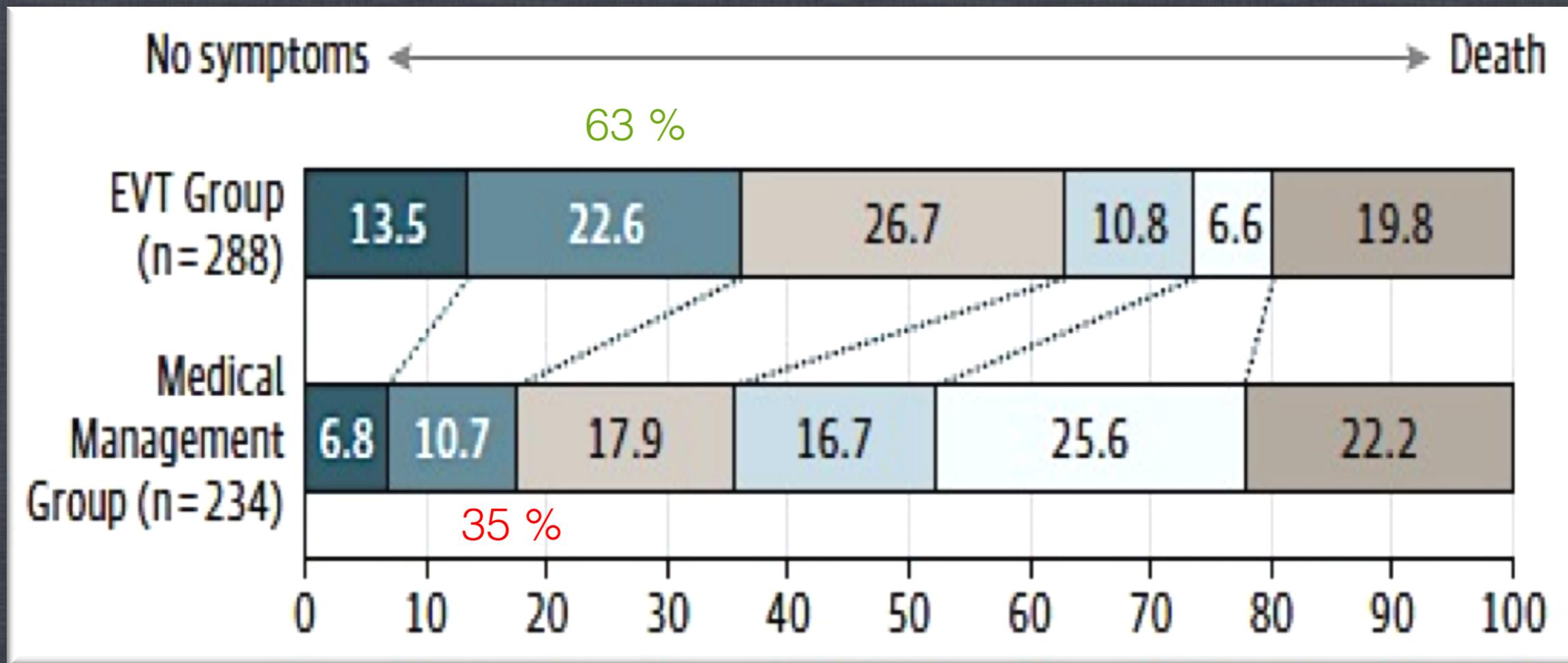
Occlusions distales

M2!



JAMA Neurol. 2016 Nov 1;73(11):1291-1296. doi: 10.1001/jamaneurol.2016.2773.

Endovascular Therapy for Acute Ischemic Stroke With Occlusion of the Middle Cerebral Artery M2 Segment.



Évaluation de la thrombectomie mécanique dans le traitement des accidents vasculaires cérébraux ischémiques aigus liés à l'occlusion artérielle distale : un essai randomisé contrôlé.

DISCOUNT

Modification substantielle n°2



stryker

balt

phenox

abmedica[®]
about people about health

MIVI
NEUROSCIENCE

Penumbra 

V1-0 du 12/12/2022

• M2 distal, M3, PCA, ACA

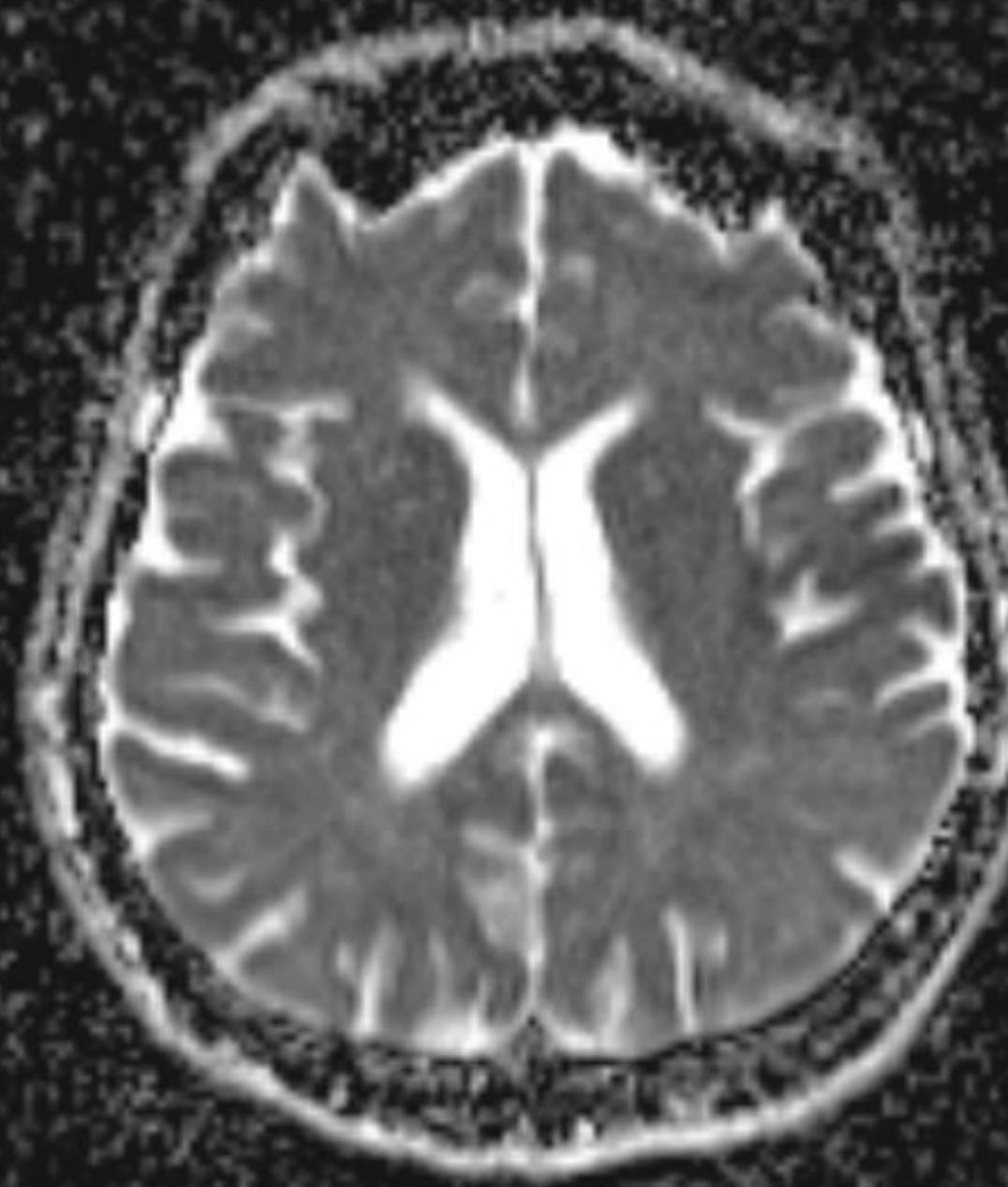
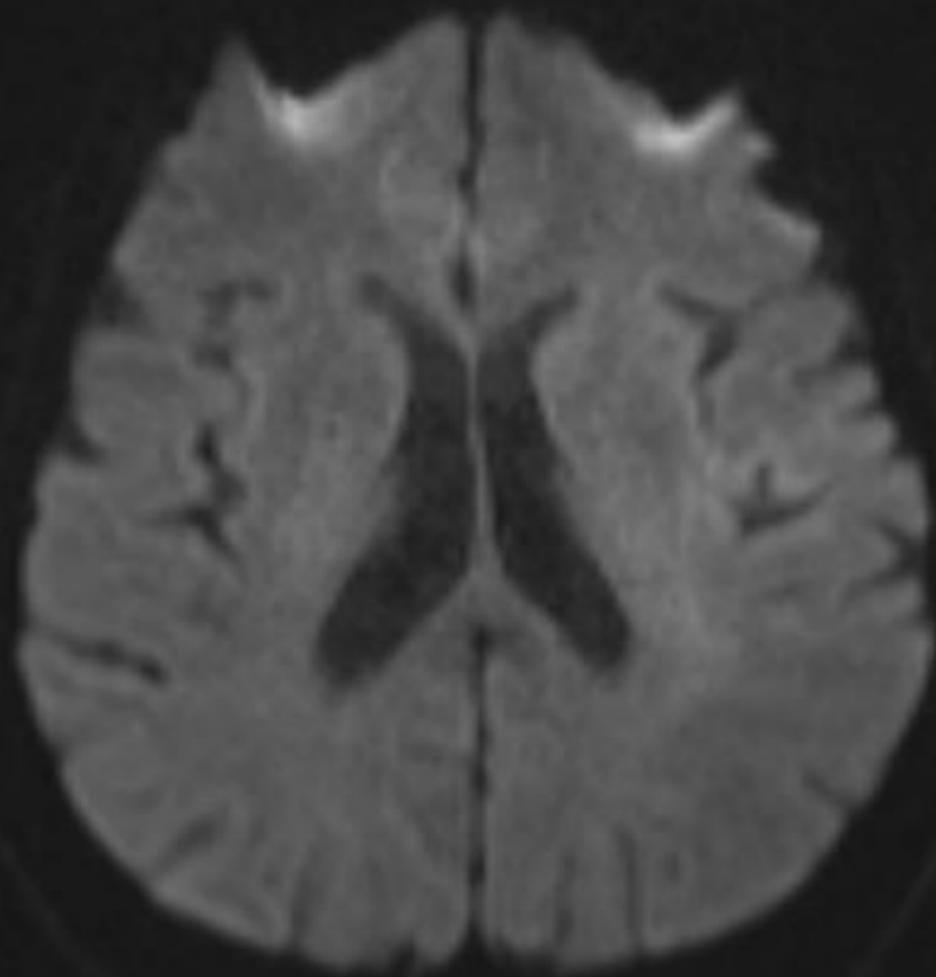
- F, 79 ans

- Aphasie à 13h30

- NIHSS 8

IRM

1H



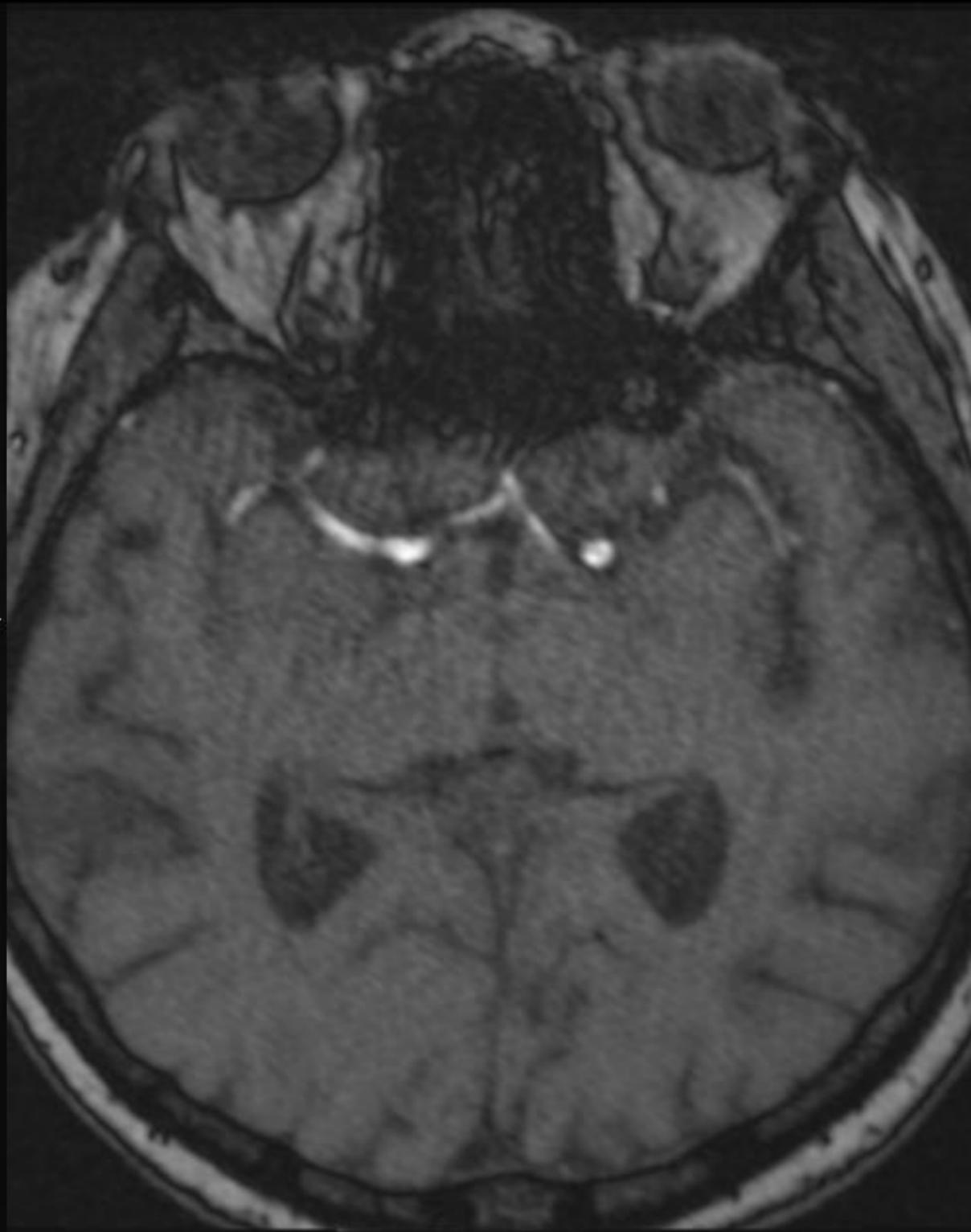
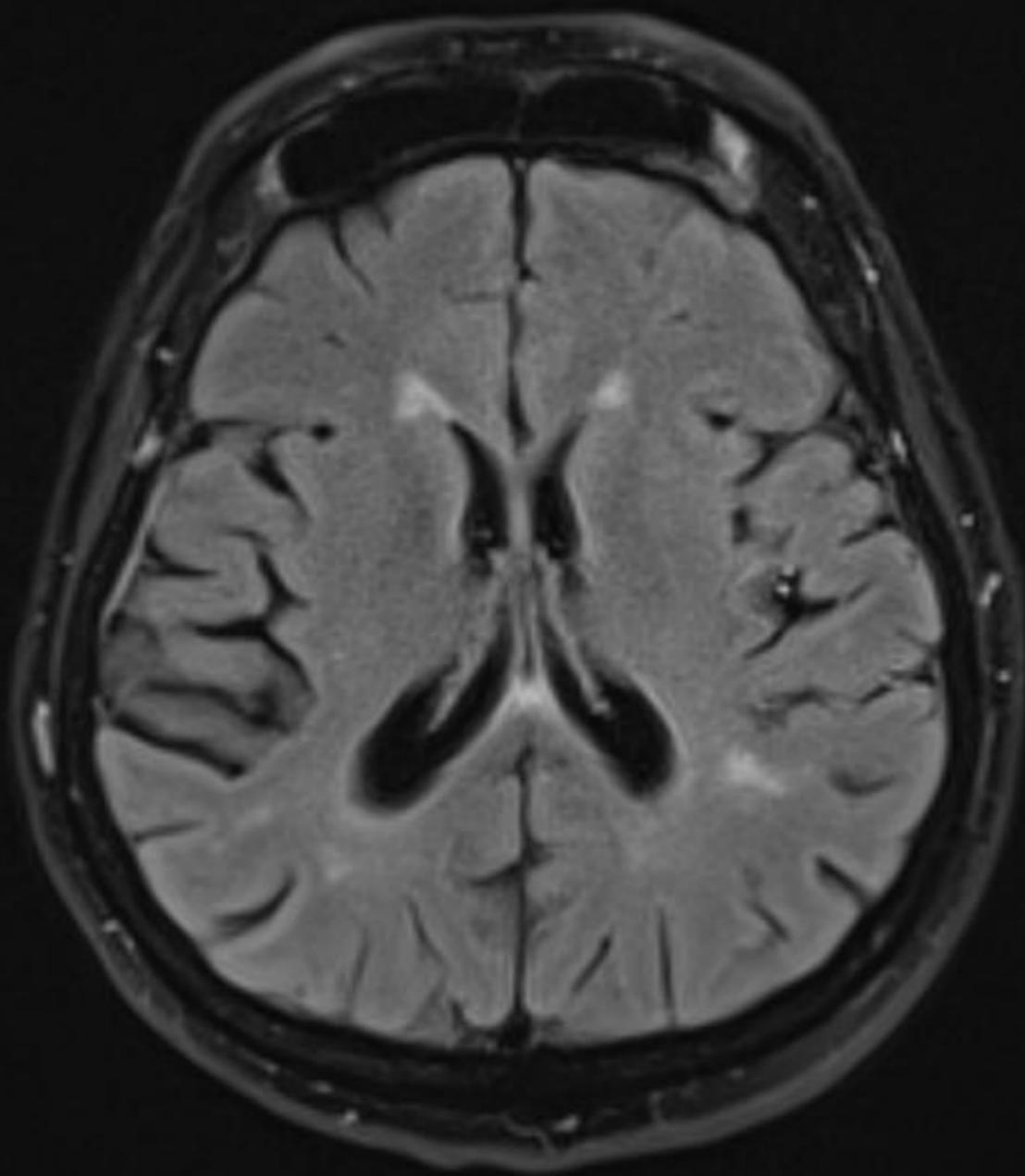
R

P

P

A

A

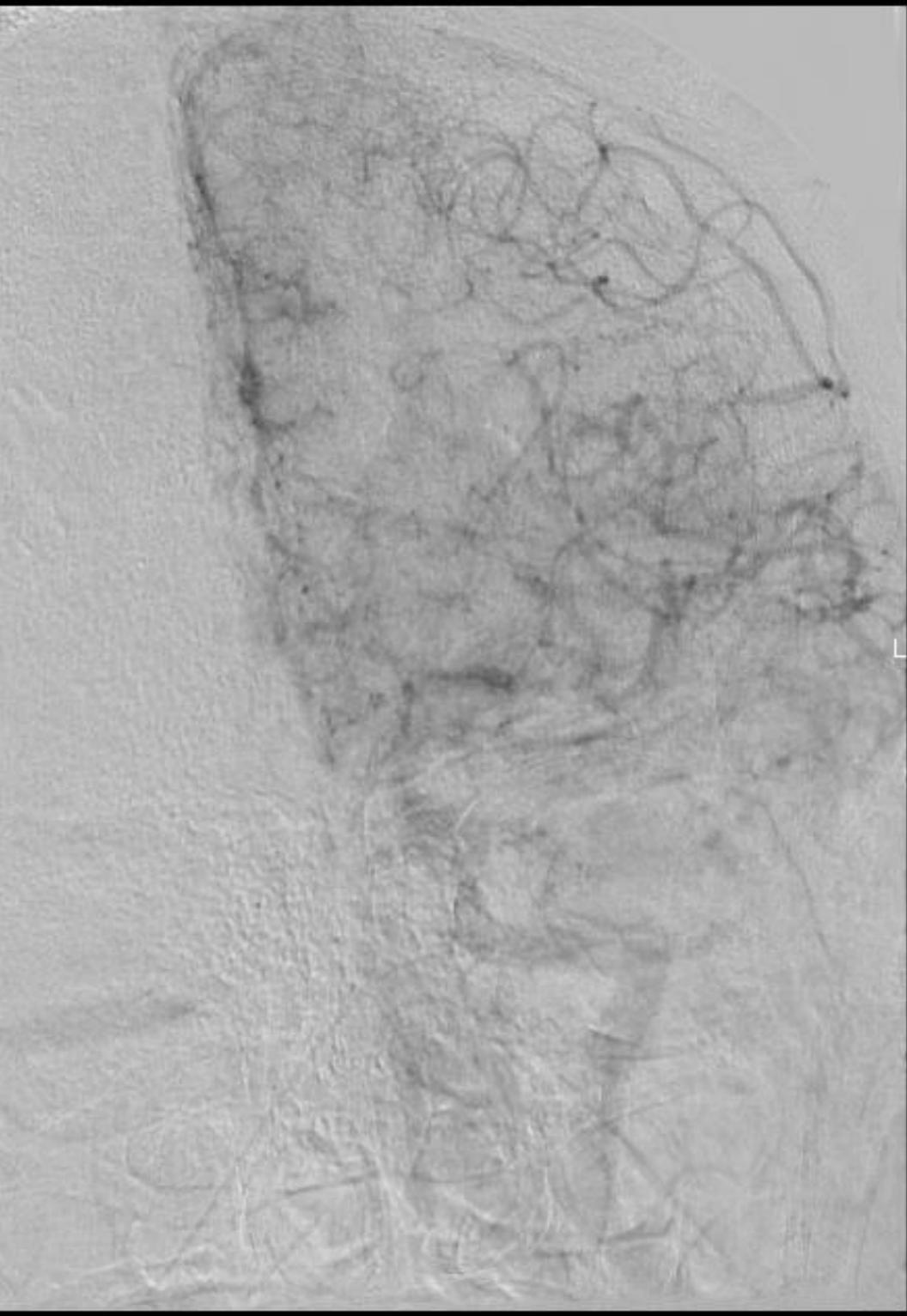


P

P

H

H



LP

A

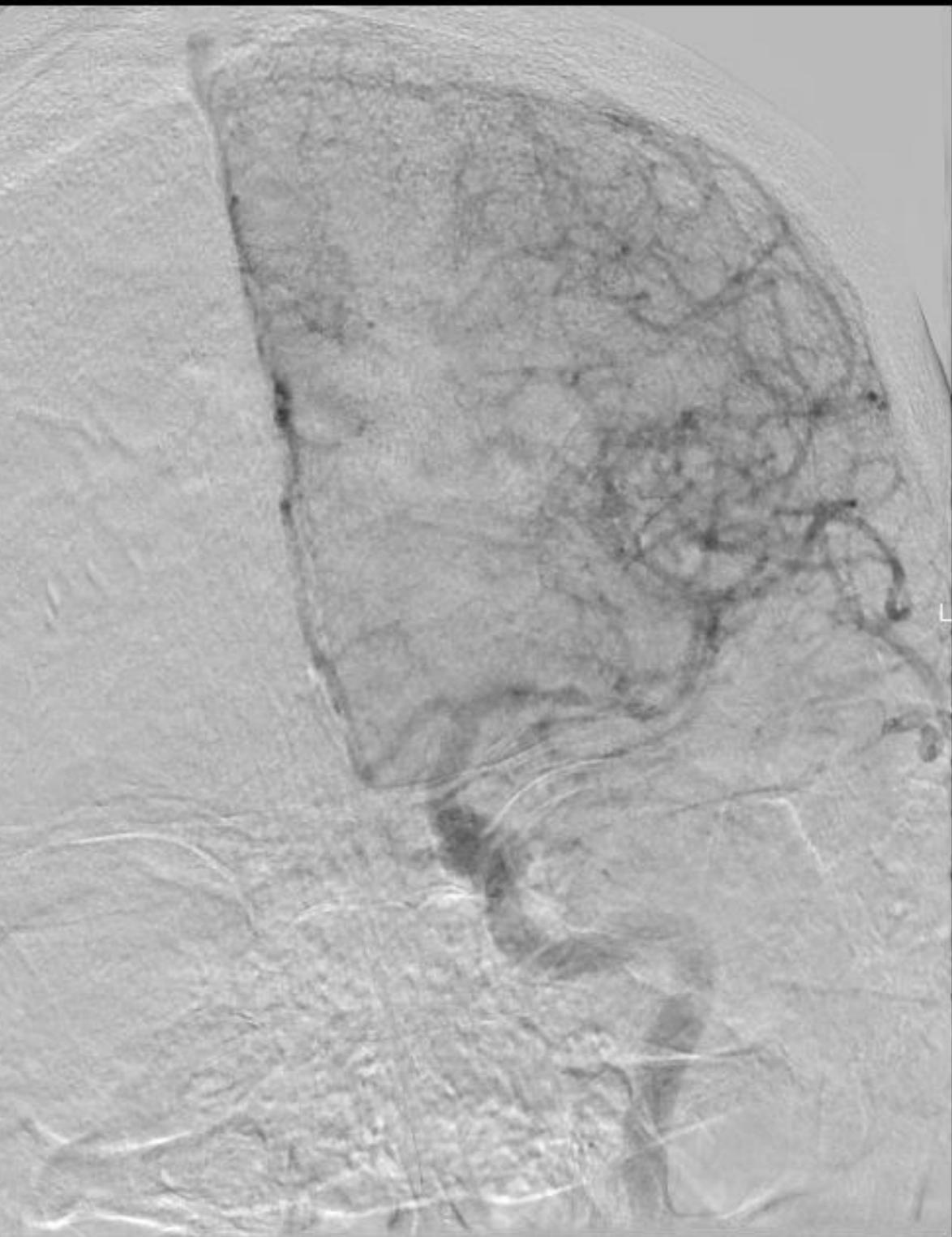
F

F

Sofia +
Vasco 10 +
Catch Mini

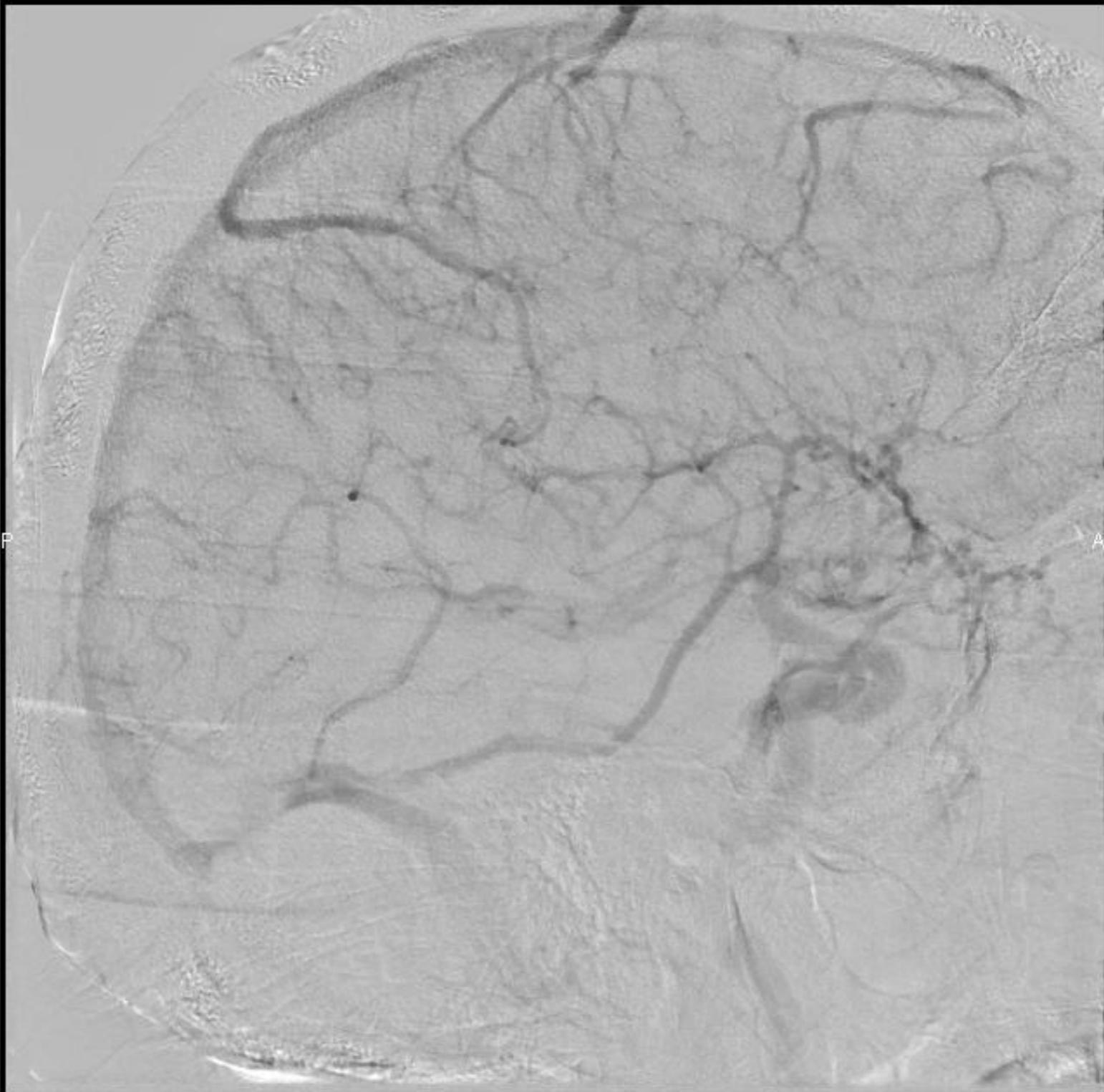


H



L P

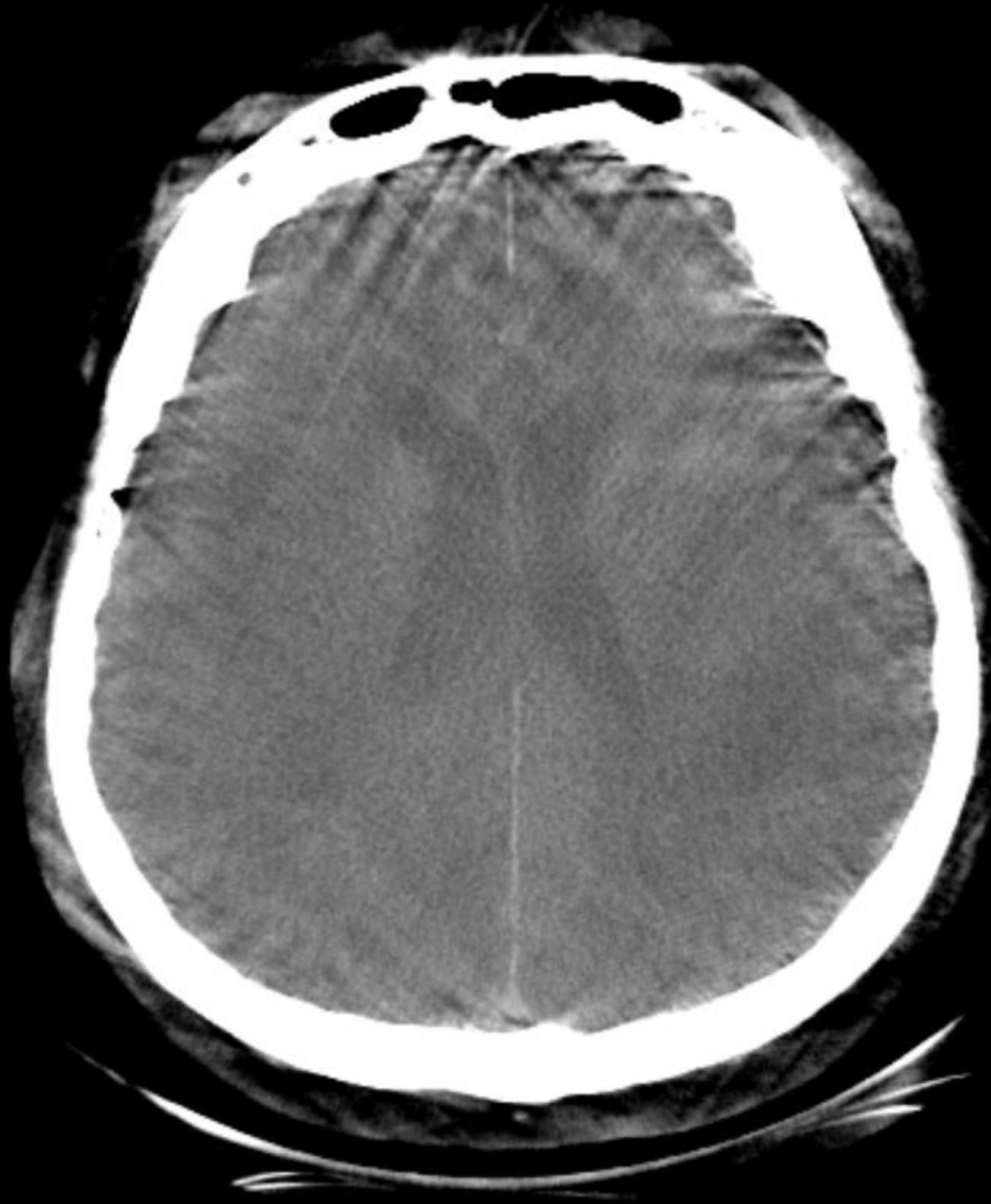
H



F

F

A



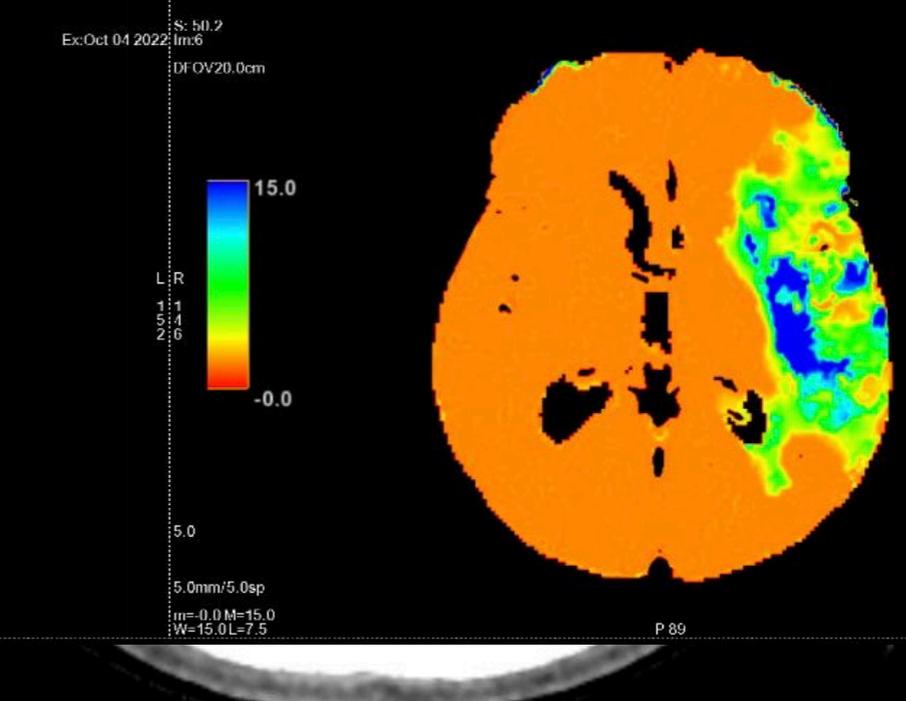
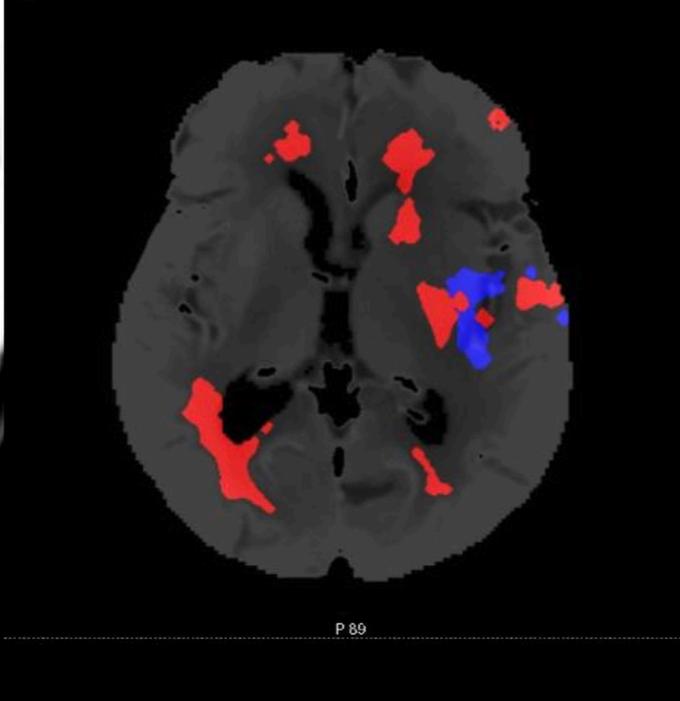
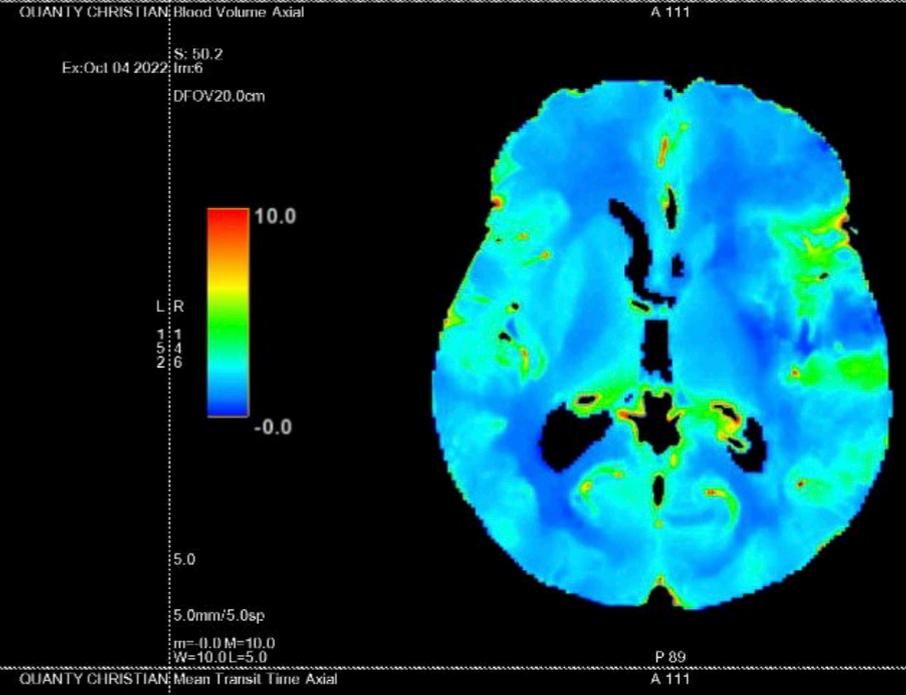
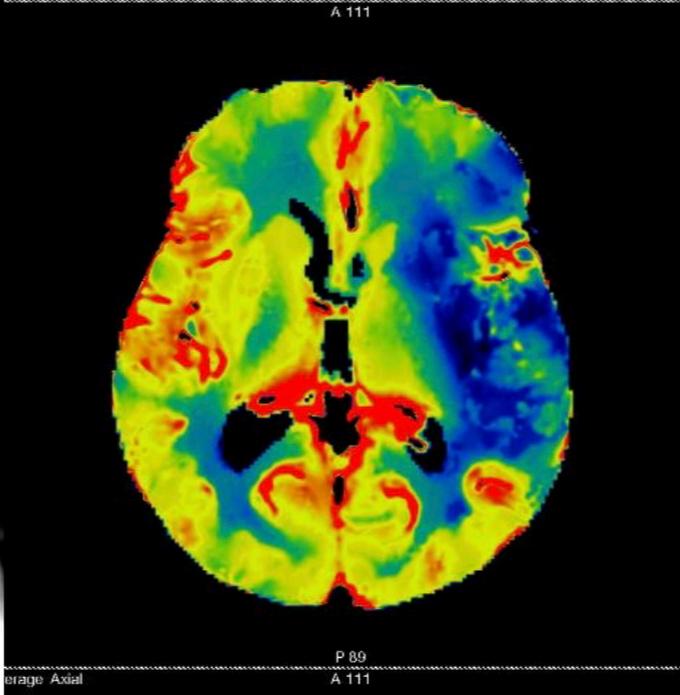
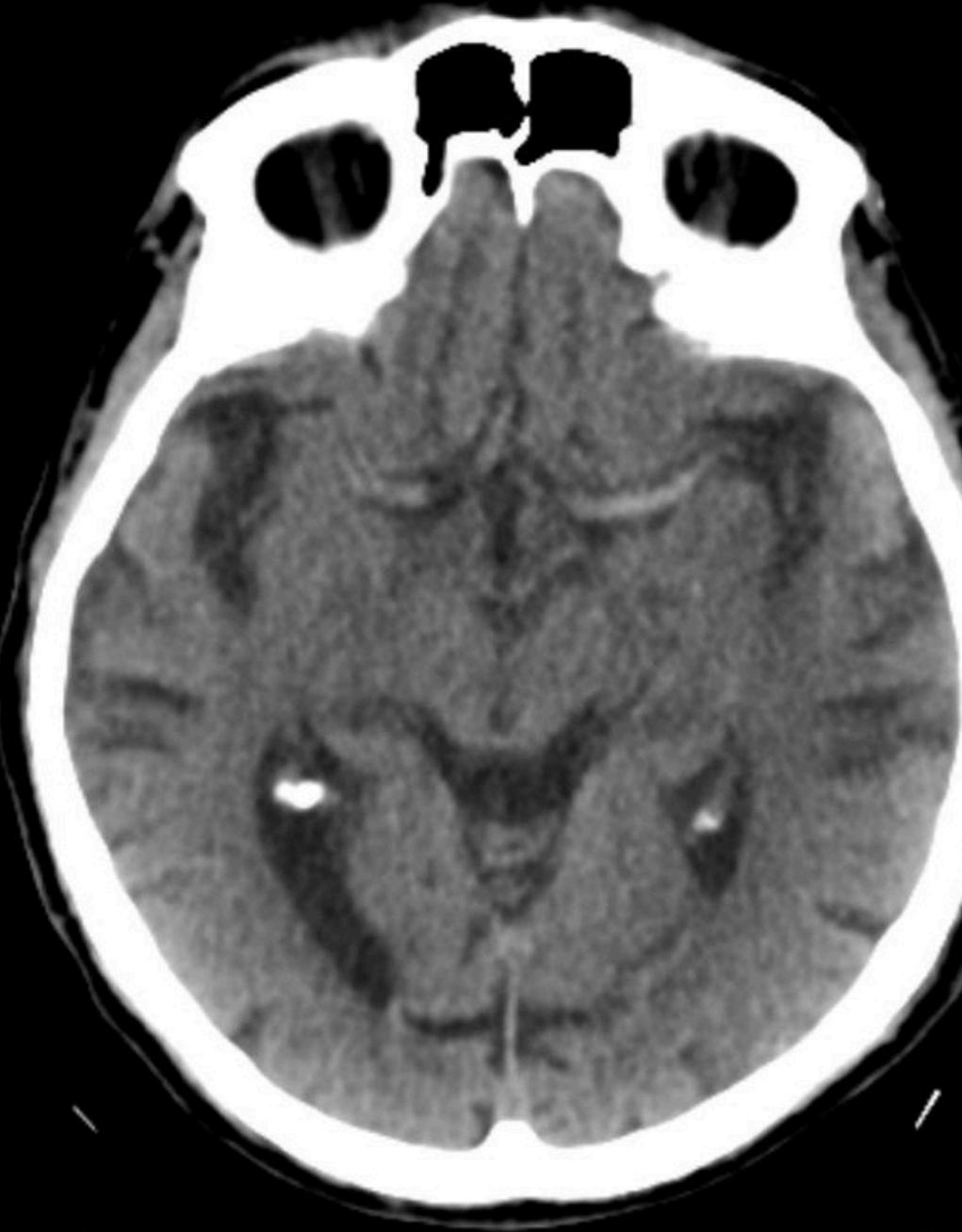
P

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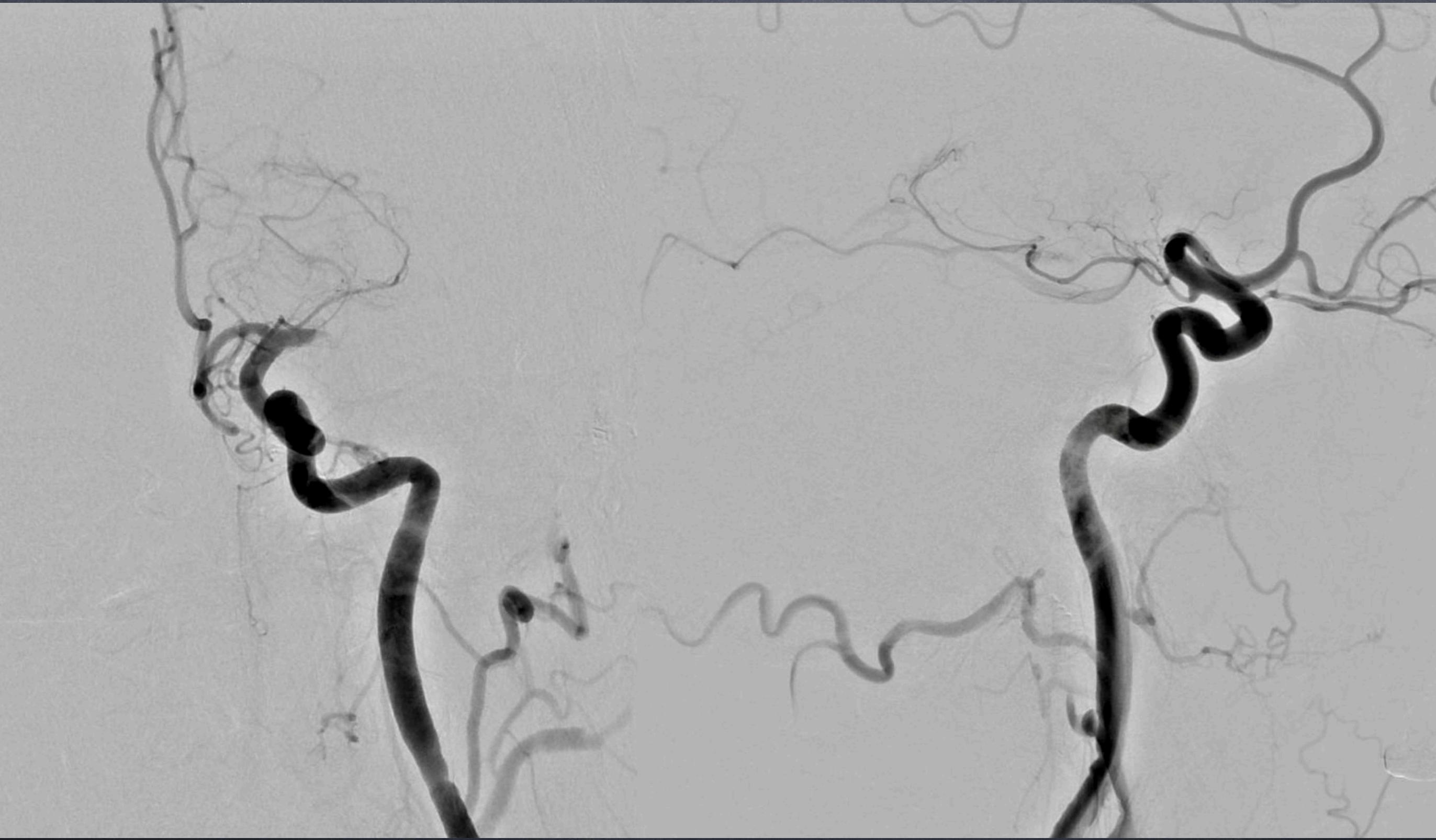


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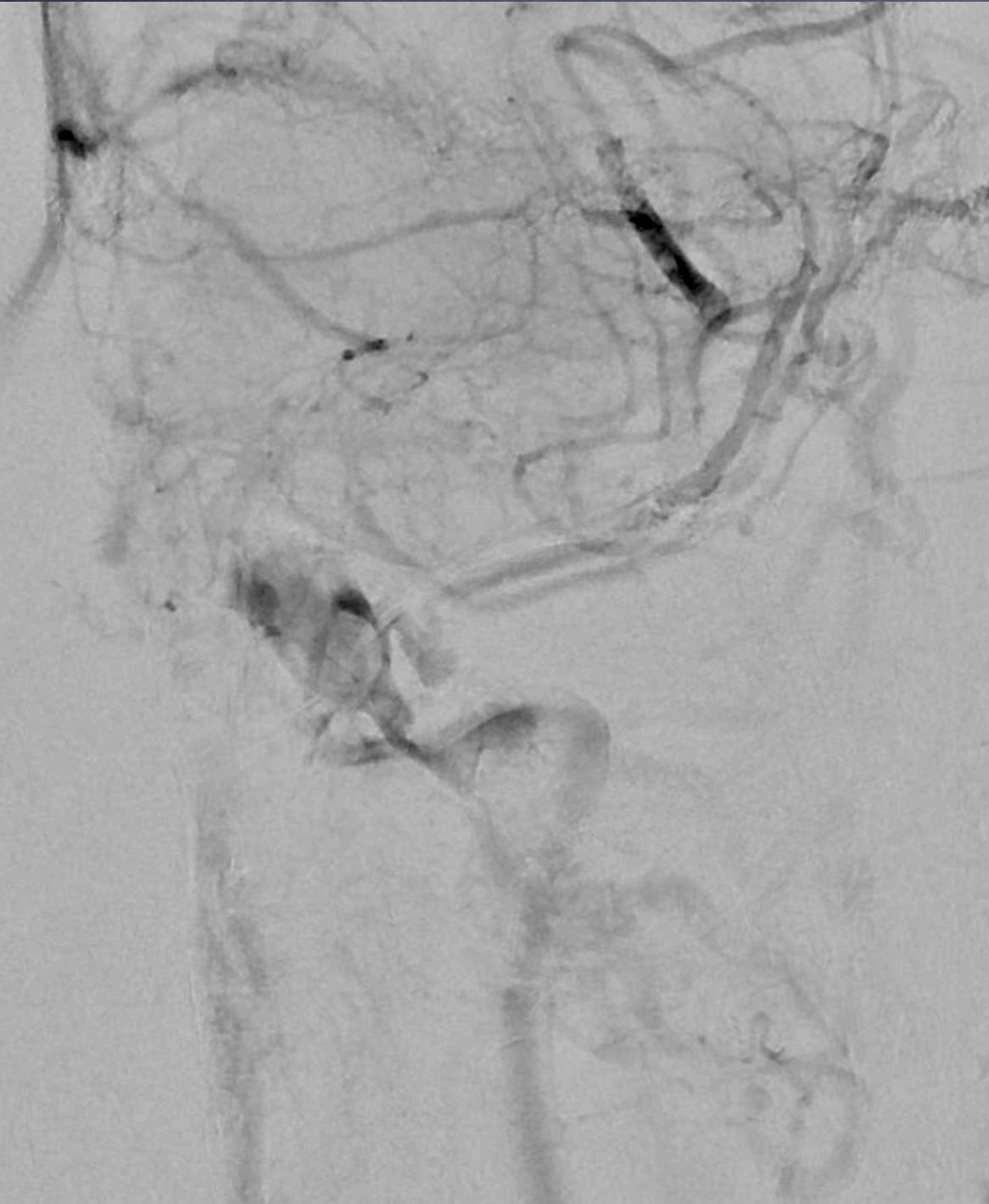
P

1er Passage

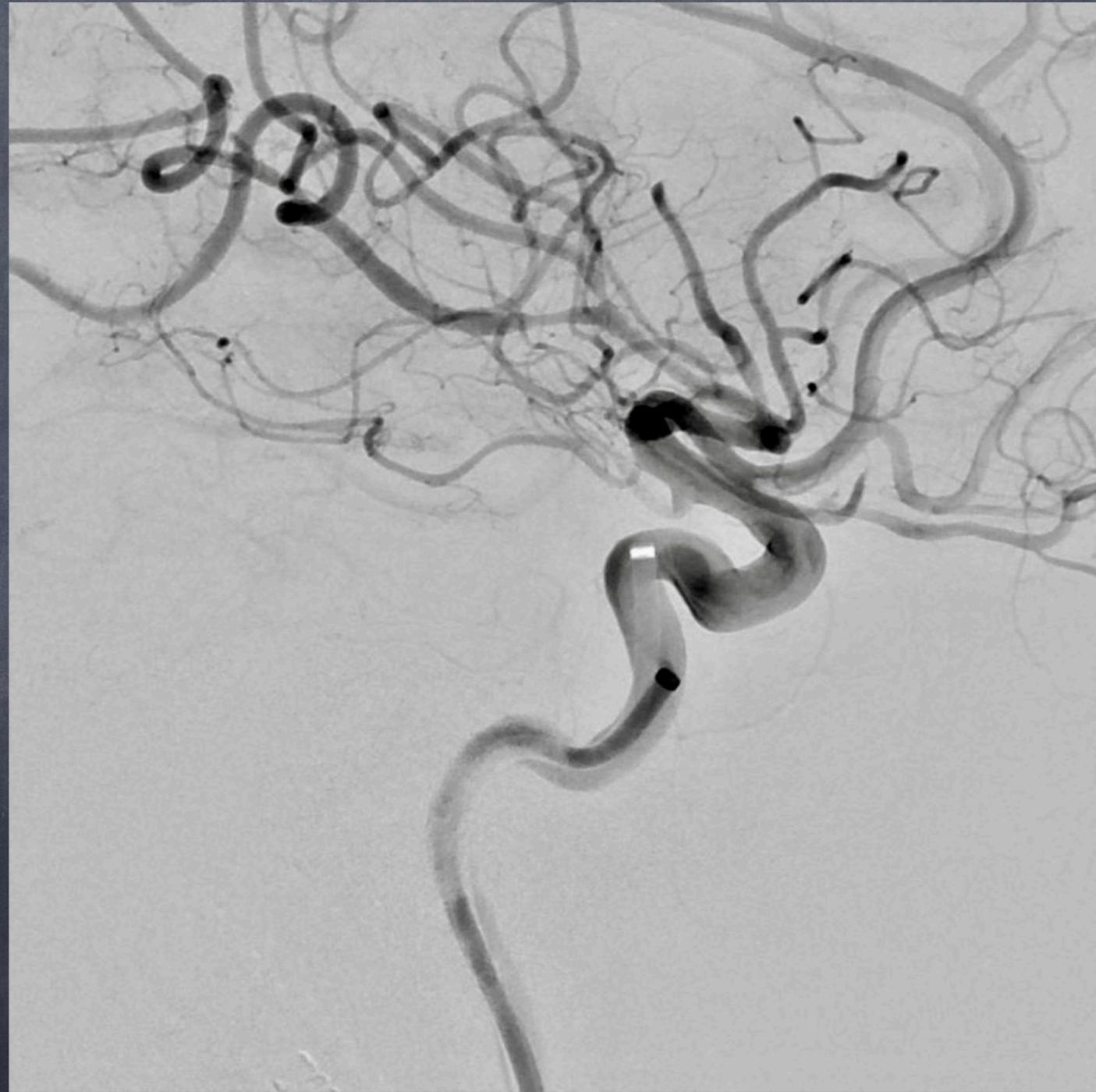


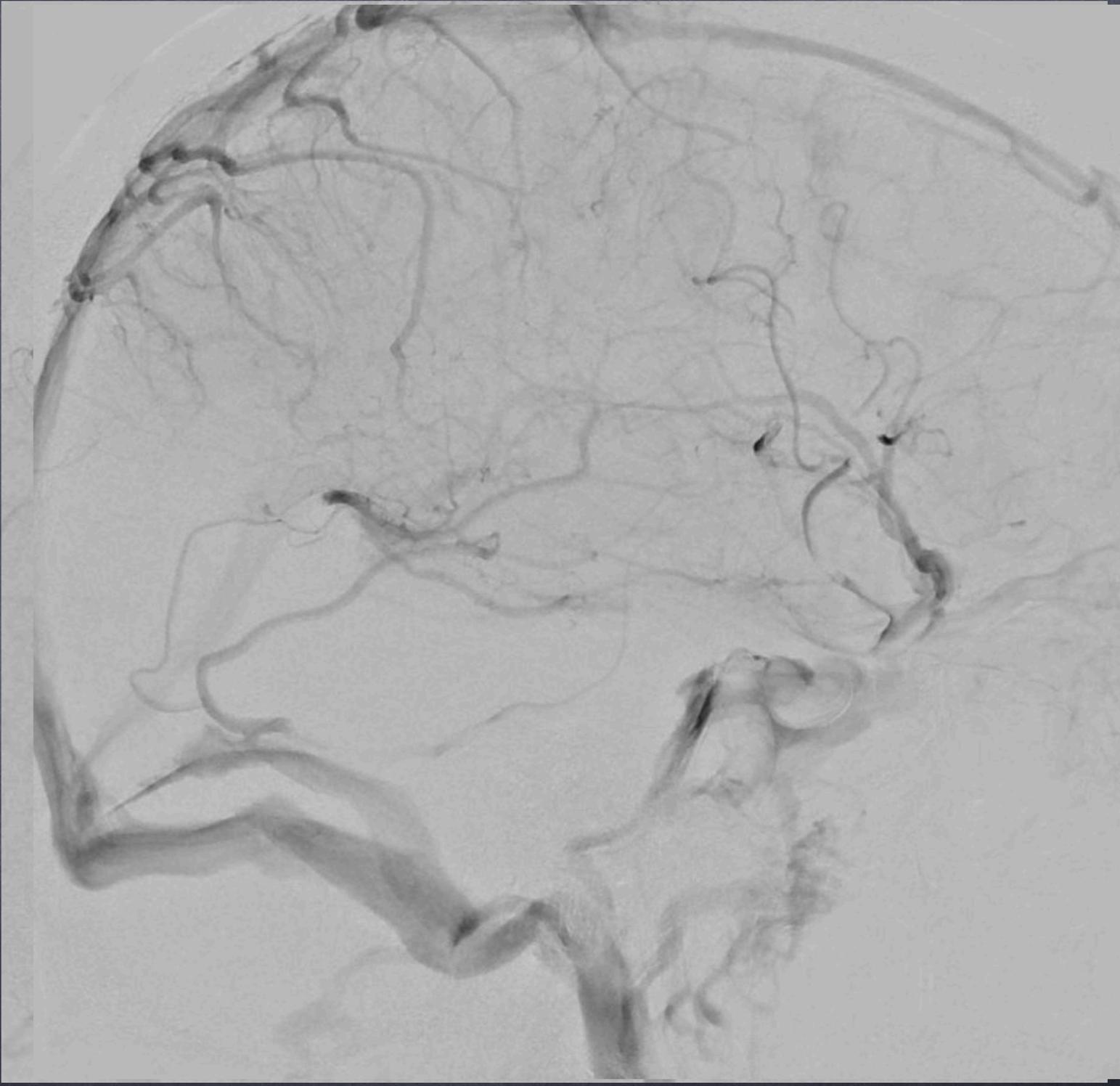


2ème Passage

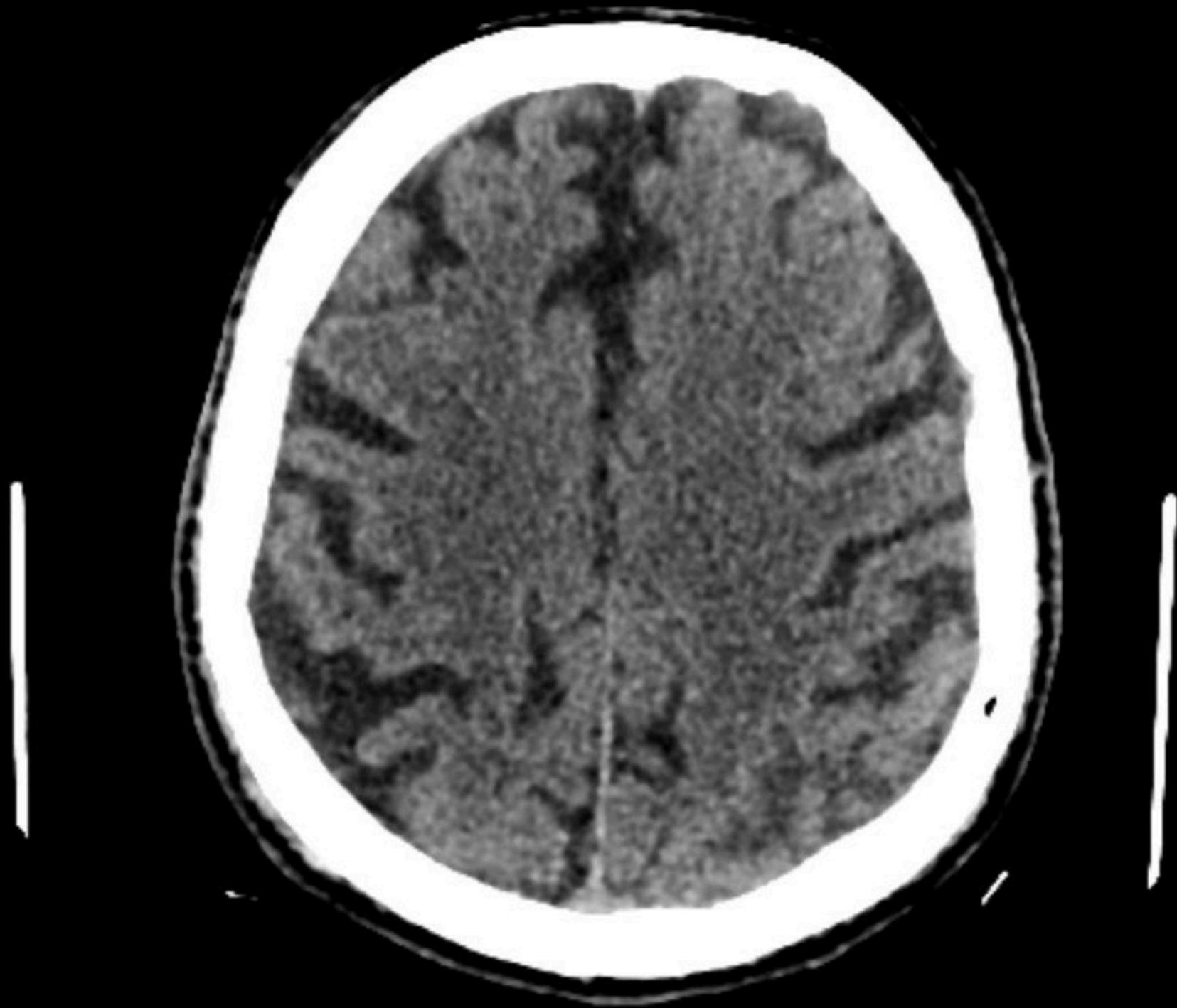


3ème Passage





A



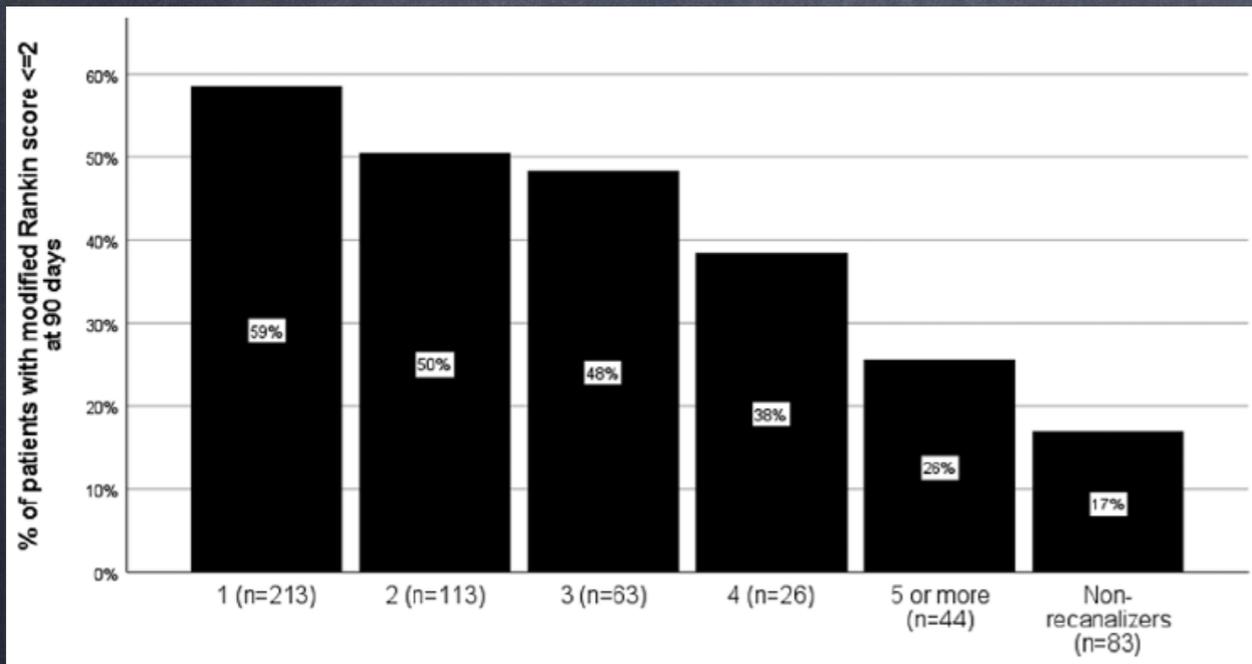
P

When to Stop

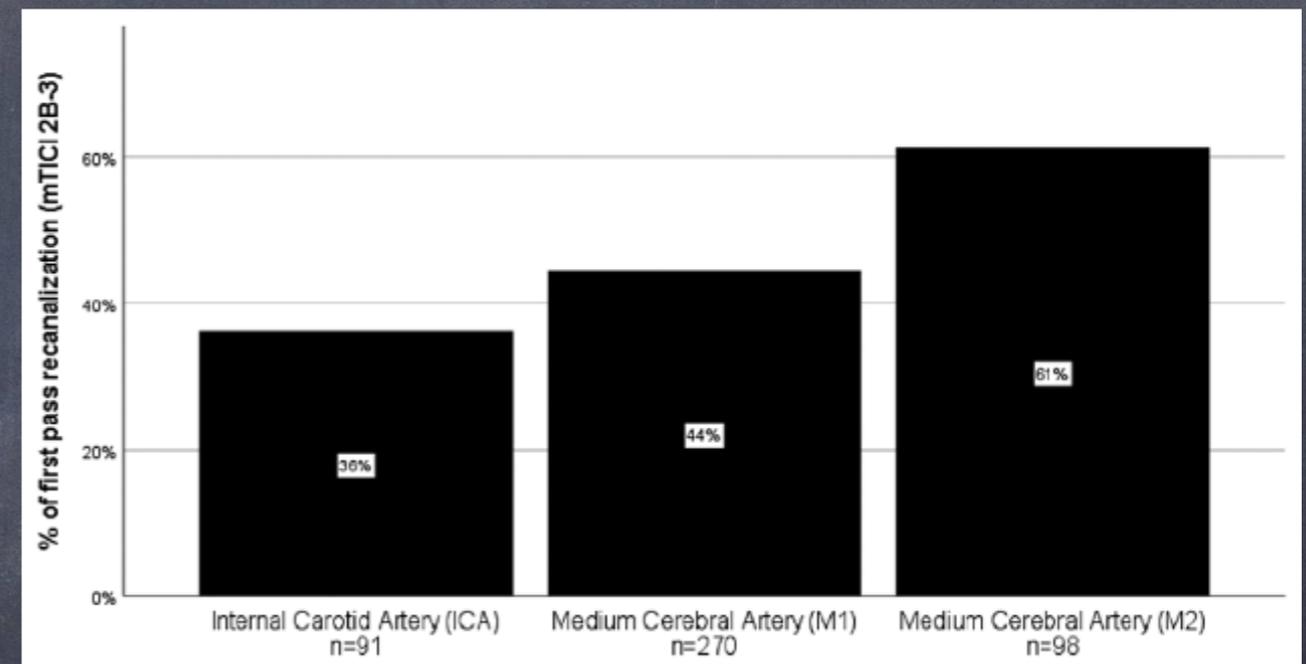
Detrimental Effect of Device Passes in Acute Ischemic Stroke Secondary to Large Vessel Occlusion

García-Tornel, A et al. Stroke. 2019;50:00-00.

542 consecutive patients



Functional outcome at 90 d depending on number of passes.



First pass recanalization depending on occluded vessel

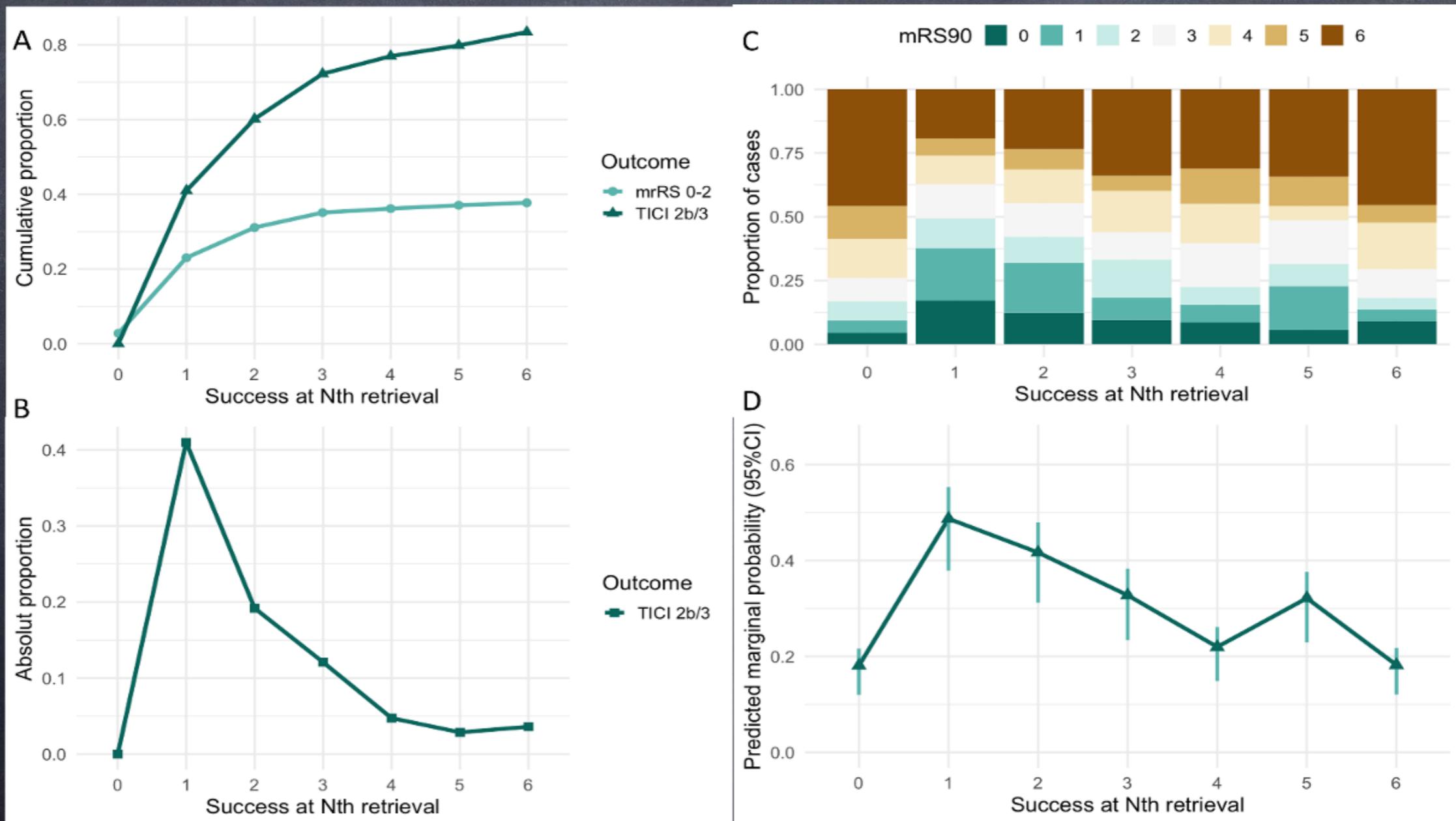
Patients with complete recanalization had worse outcomes for each device pass needed to achieve complete recanalization (P<0.01)

Good Clinical Outcome Decreases With Number of Retrieval Attempts in Stroke Thrombectomy

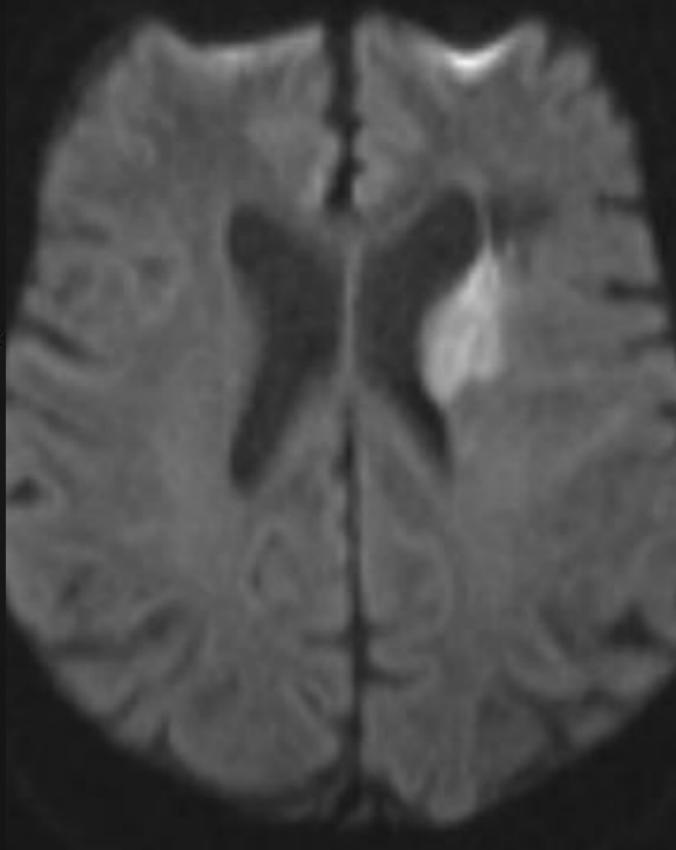
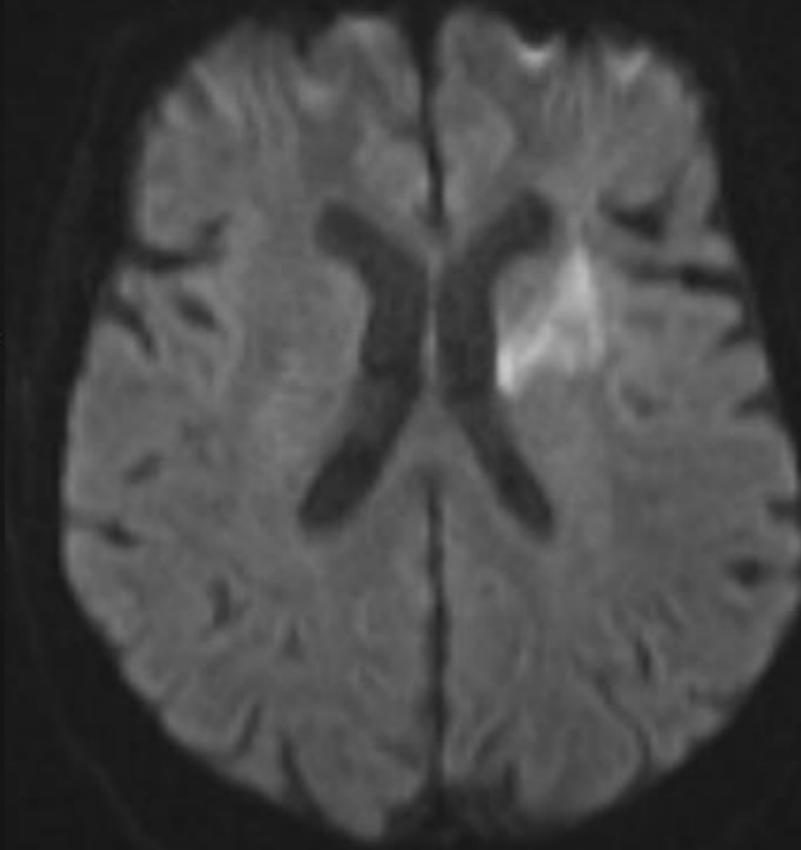
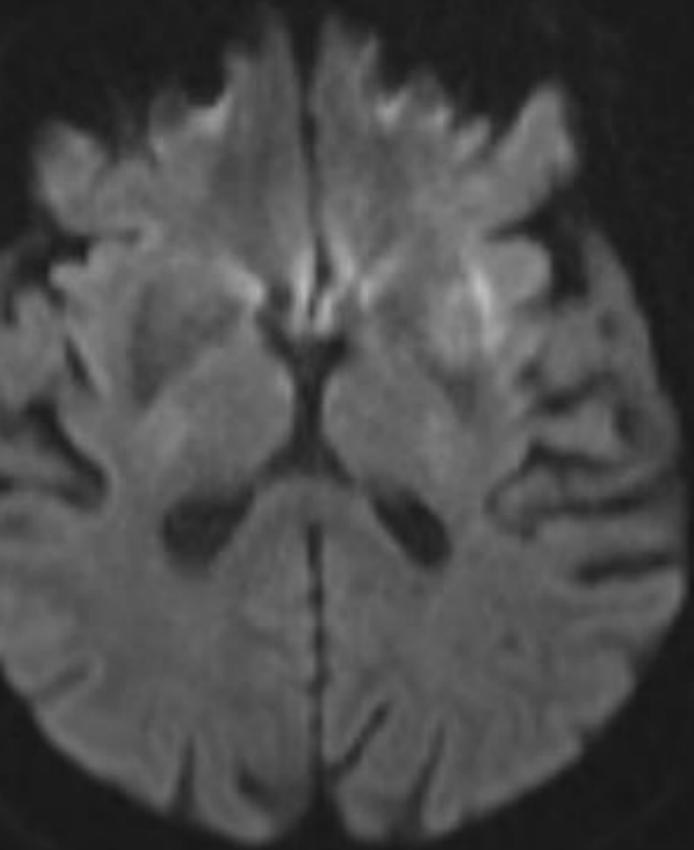
Beyond the First-Pass Effect

Fabian Flottmann¹, MD; Caspar Brekenfeld, MD; Gabriel Broocks², MD; Hannes Leischner, MD, PhD; Rosalie McDonough, MD; Tobias D. Faizy³, MD; Milani Deb-Chatterji, MD; Anna Alegiani⁴, MD; Götz Thomalla, MD; Anastasios Mpotsaris⁵, MD; Christian H. Nolte⁶, MD; Jens Fiehler, MD; Máté E. Maros⁷, MD, MSc; for the GSR investigators*

Stroke. 2021 Jan;52(2):482-490



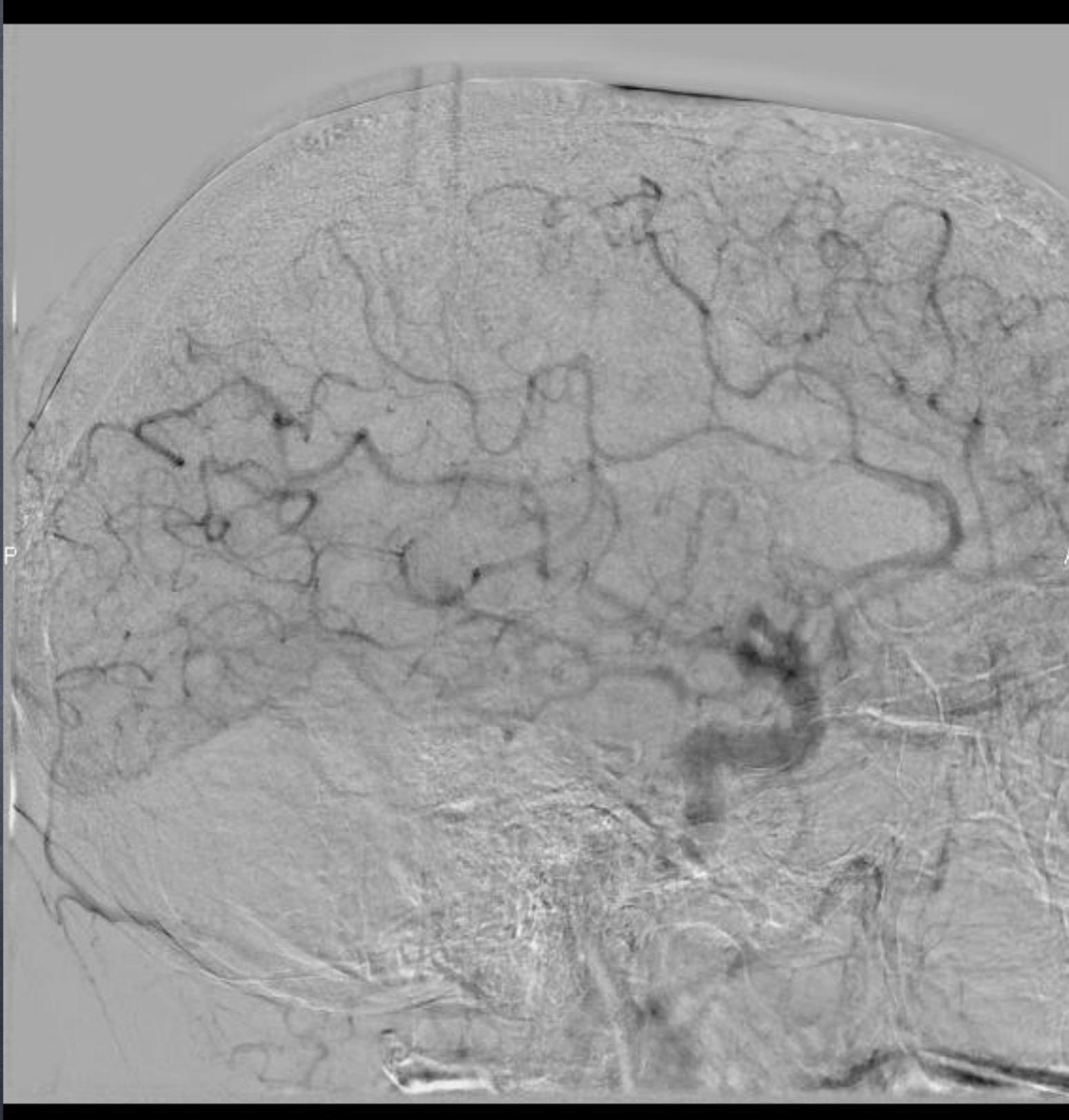
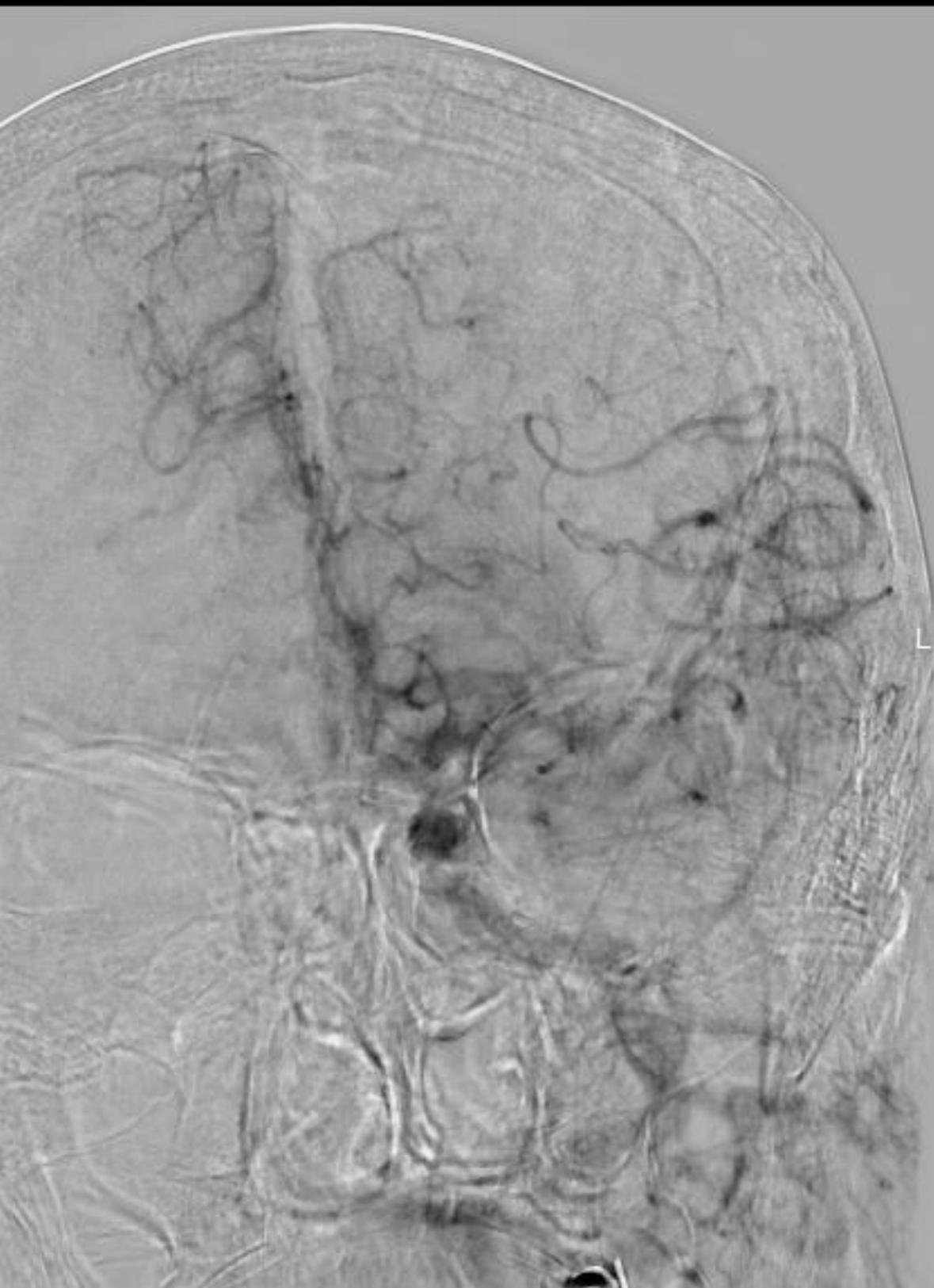
Migration



P

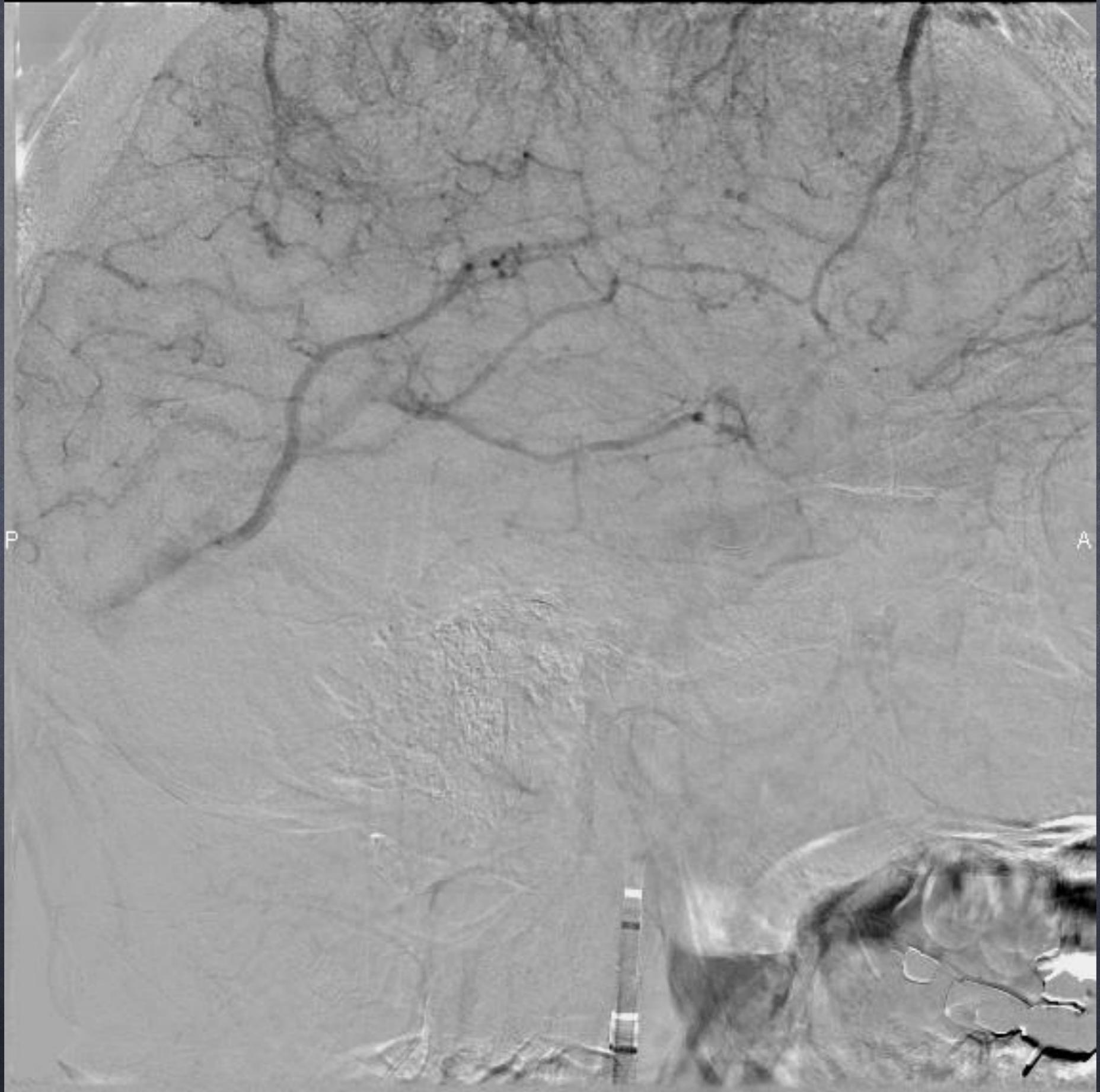
P

P



Merci 9F
Sofia+
Trevo 4





P

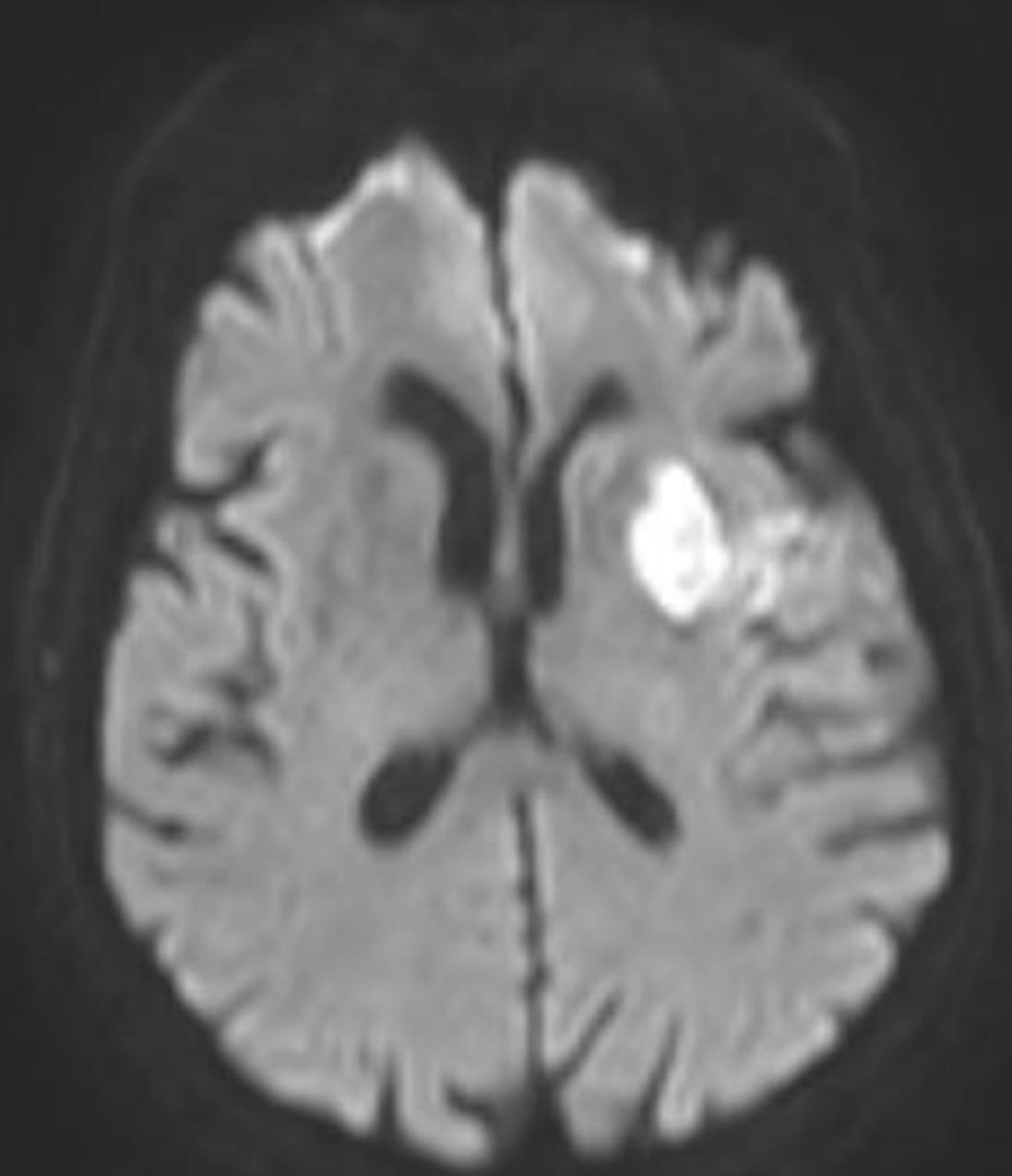
A



NIHSS 2

9

R



L

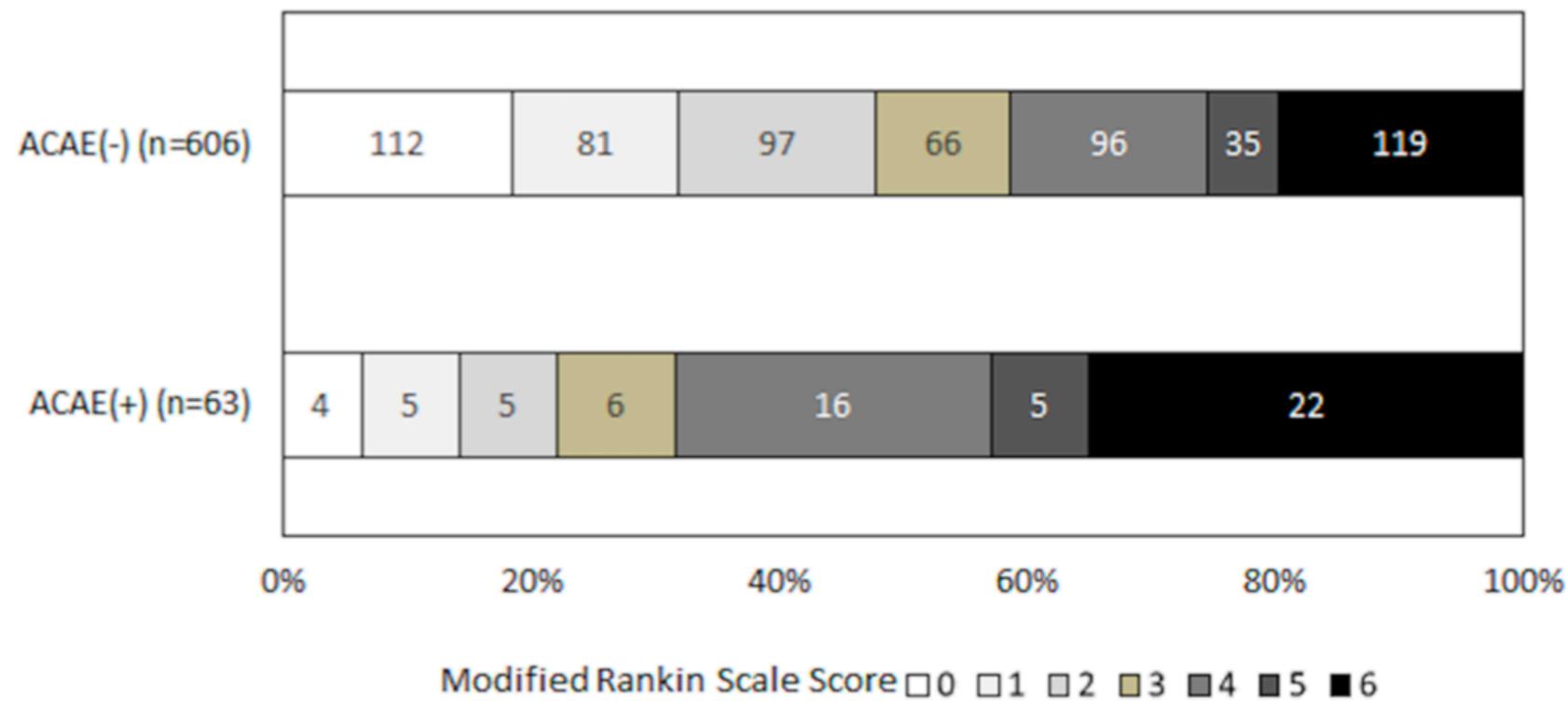
ORIGINAL RESEARCH

Anterior cerebral artery embolism during thrombectomy increases disability and mortality

Vanessa Chalumeau,¹ Raphaël Blanc,¹ Hocine Redjem,¹ Gabriele Ciccio,¹ Stanislas Smajda,¹ Jean-Philippe Desilles,¹ Daniele Botta,¹ Simon Escalard,¹ William Boisseau,¹ Benjamin Maïer,¹ Julien Labreuche,² Mickaël Obadia,³ Michel Piotin,¹ Mikael Mazighi^{1,4,5,6}

- 700 patients AVC circ. antérieur
- Incidence globale de 9,4%
- Tandem (19%), T carot (15%), M1 (5%)
- Aspiration seule (6%), stent seul (14%)
- Pas de difference si catheter à ballon

90-mRs



- Réduction de moitié des résultats favorables
- Double de complications hémorragiques et taux de mortalité
- Même si recanalisation, moins bons résultats cliniques à 90 jours

Dissection / Vasospasme

- ⊙ Pendant la navigation
- ⊙ Patient jeune
- ⊙ Traumatisme stent retriever

A

H



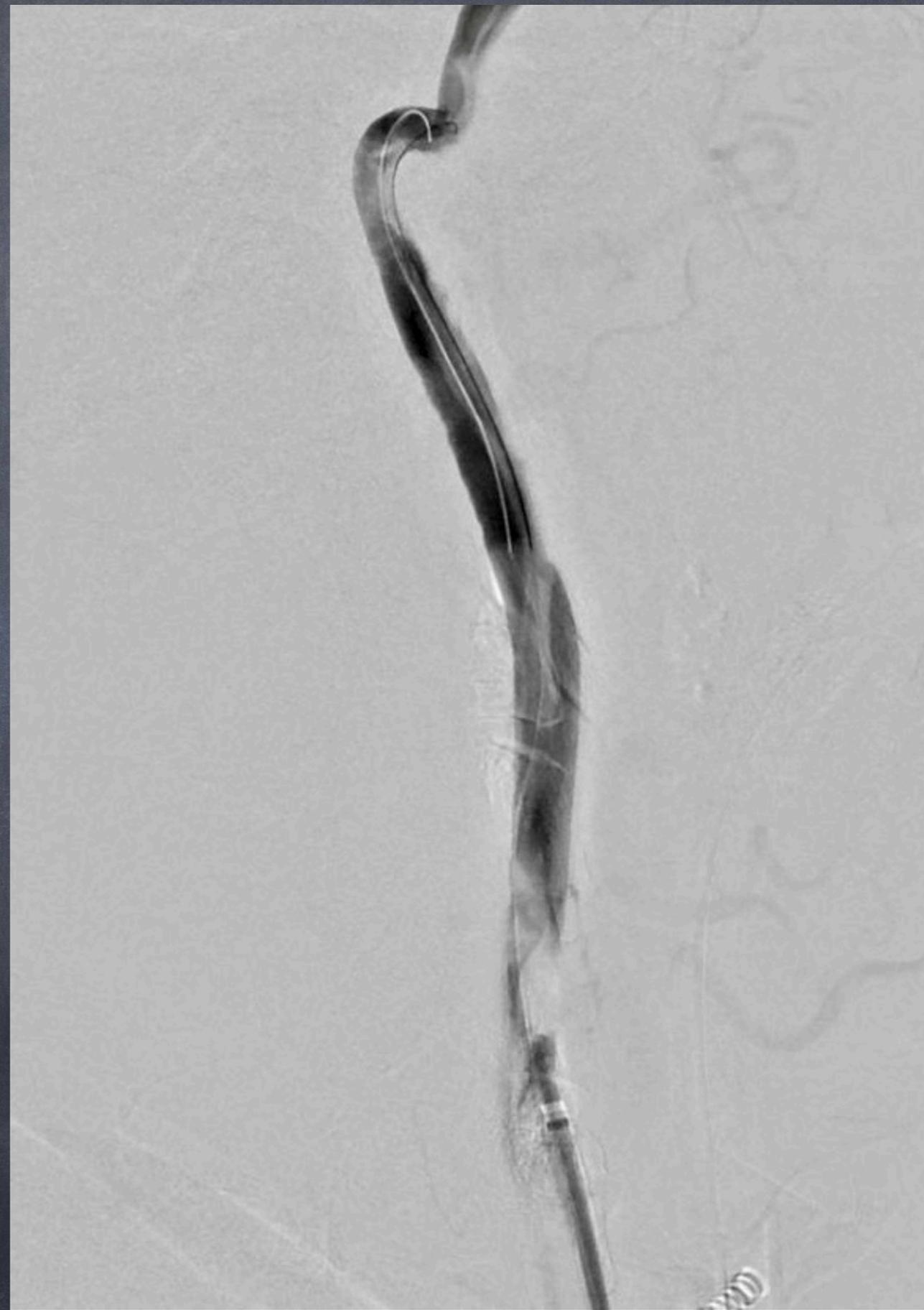
F

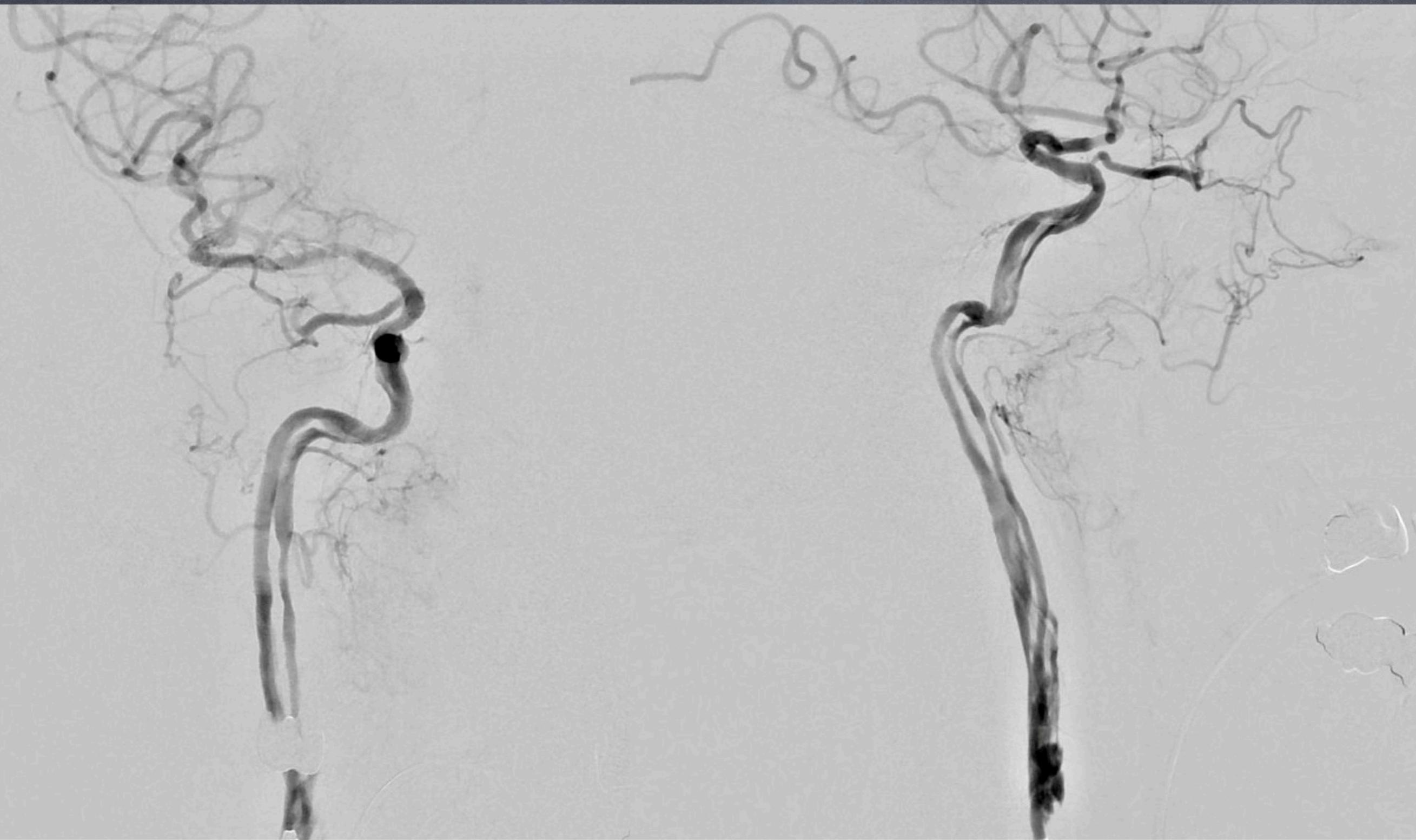
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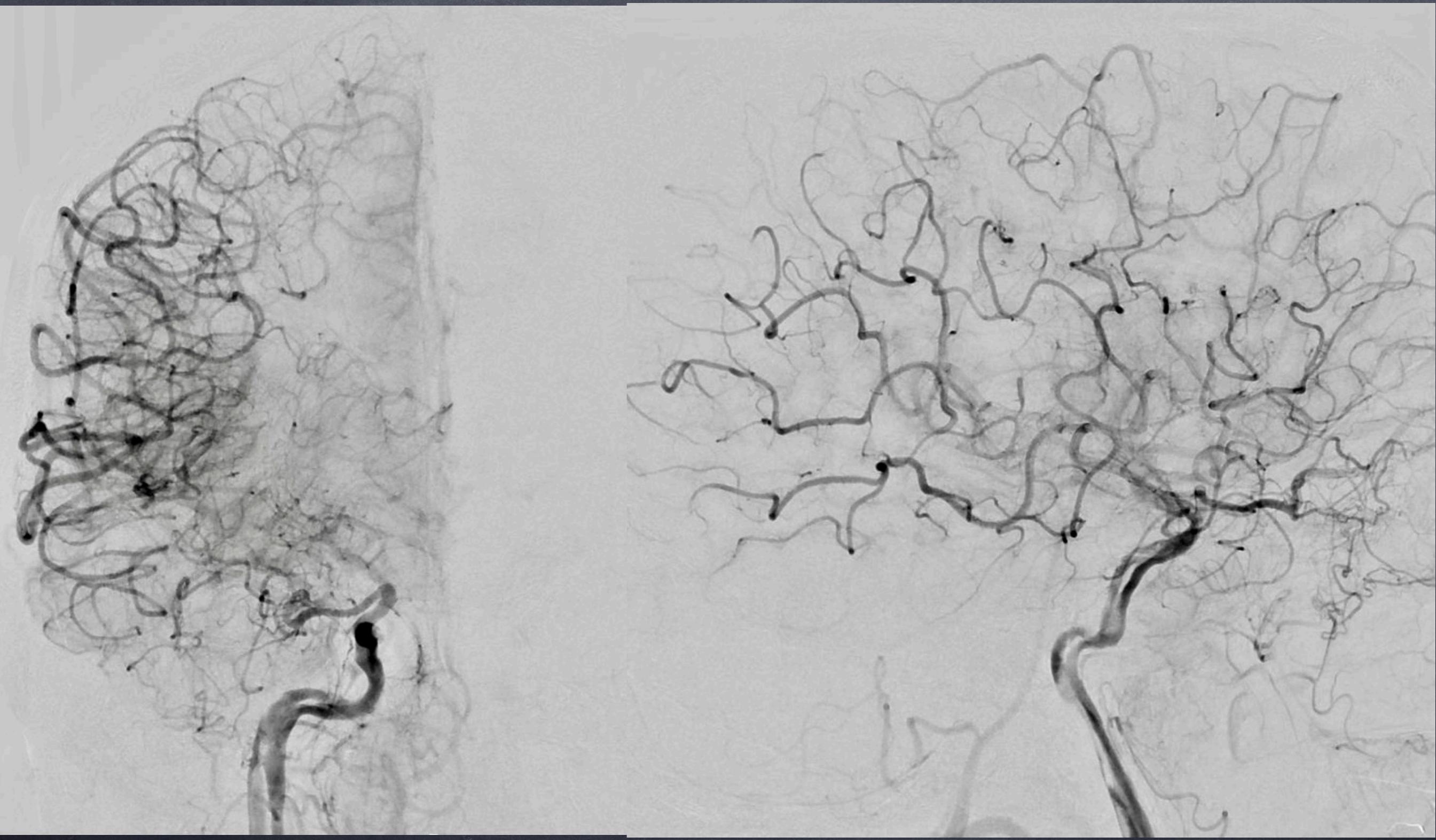
H



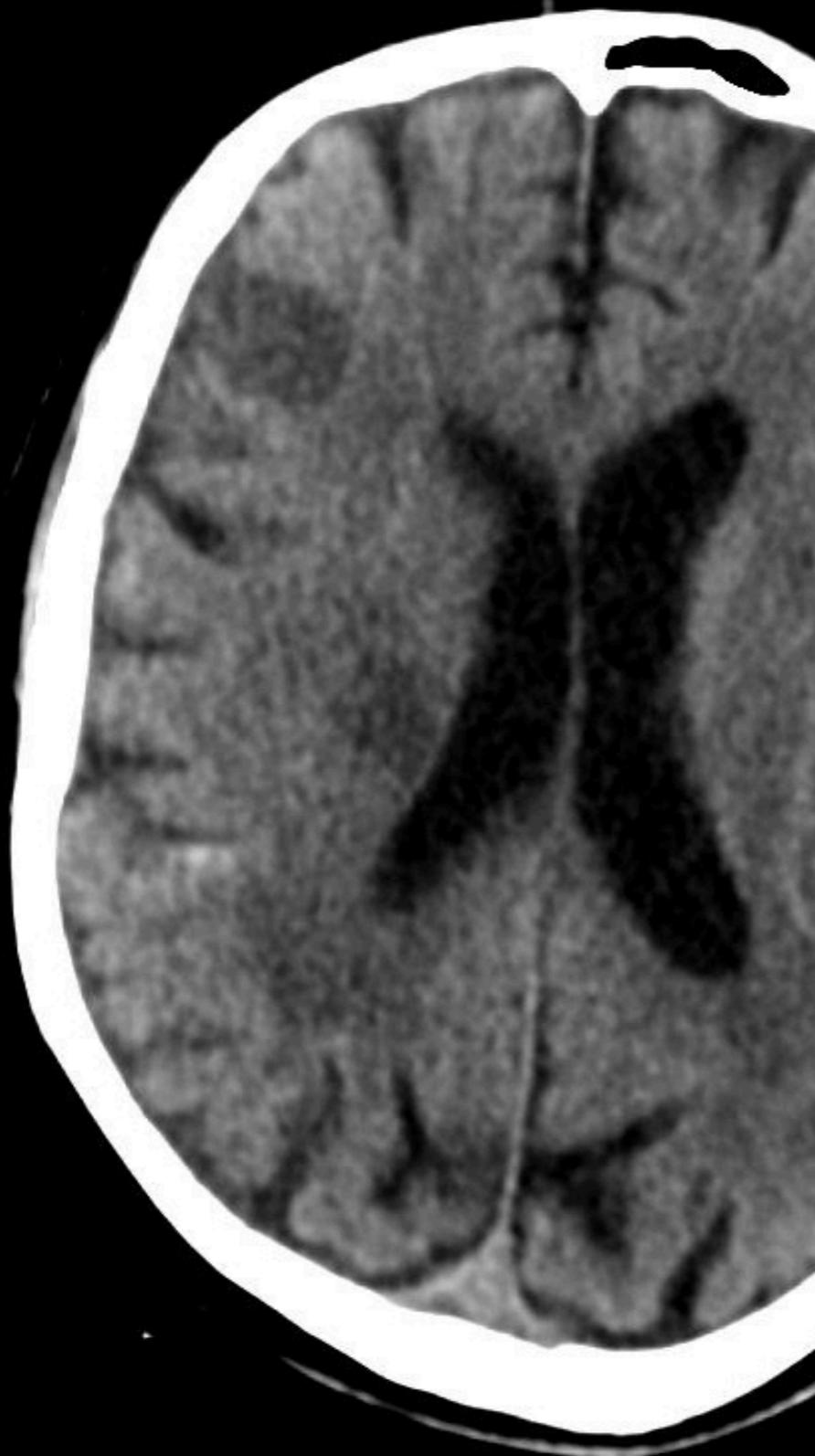
F





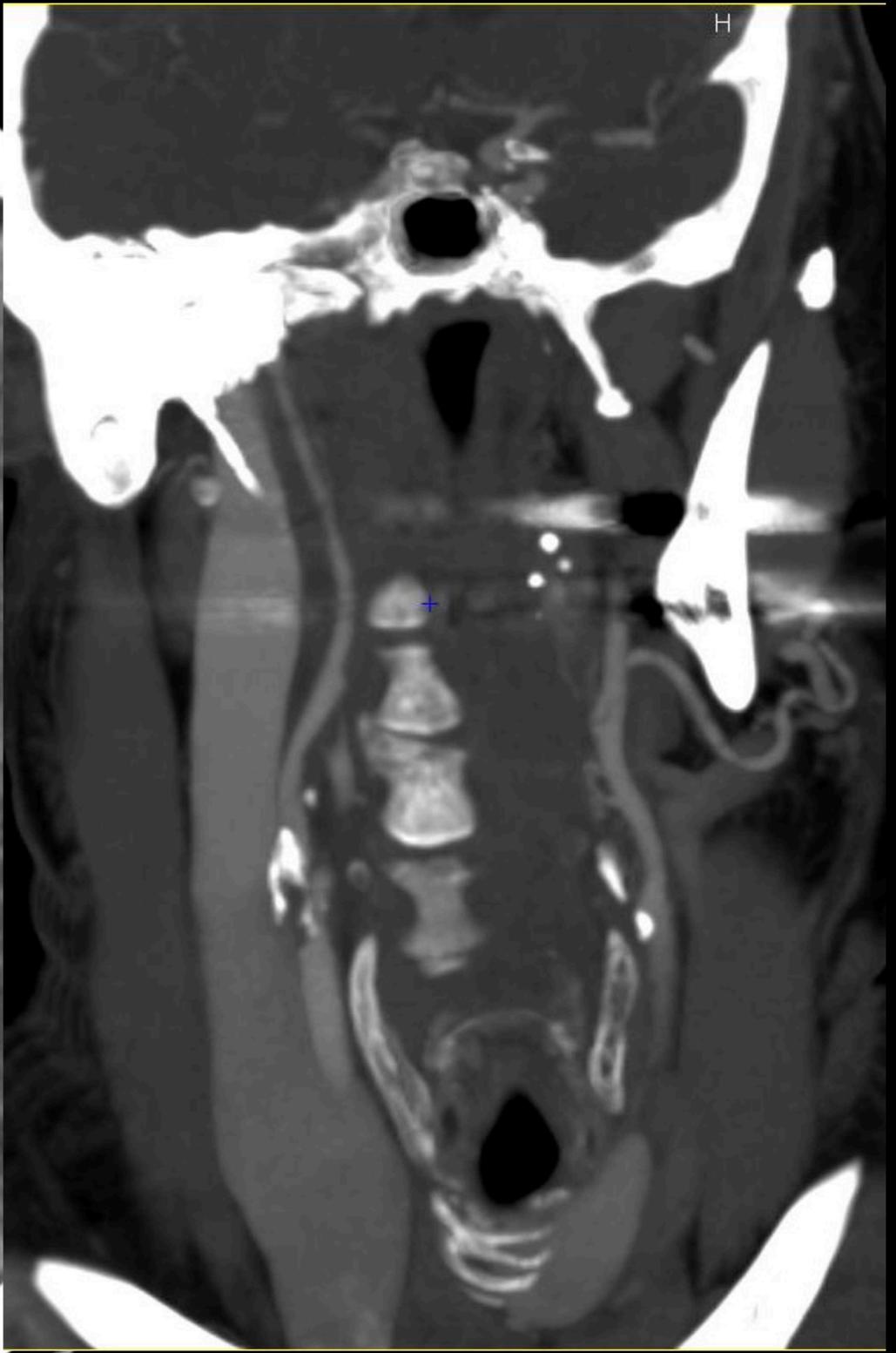


A



P

H



Dissection

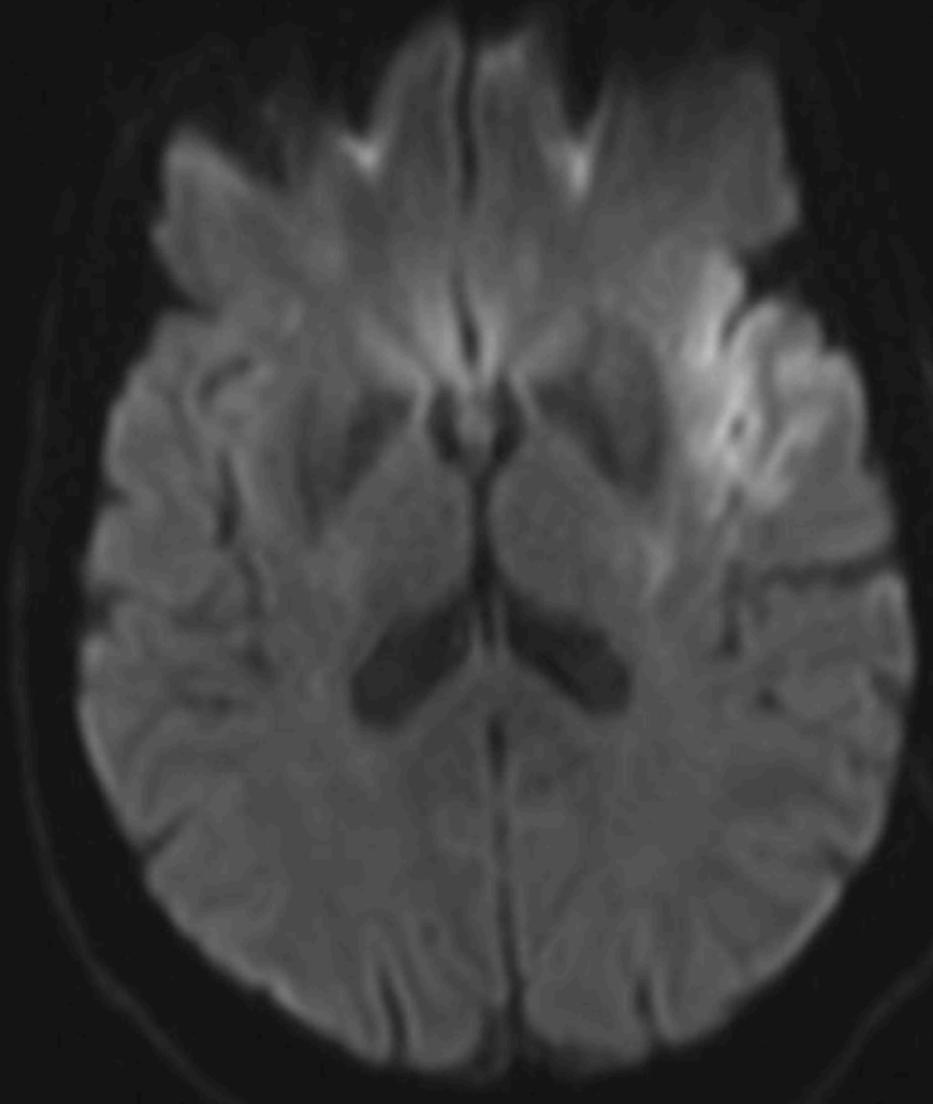
Low
Recurrence
Risk

Thrombectomy
+
Medical Therapy

Carotid Stent if Willis
non functional or
severe stenosis

- Stent x pas stent
- Très peu d'étude, critère d'exclusion
- Toujours regarder les autres axes
- S'en assurer d'être dans la vraie lumière

A

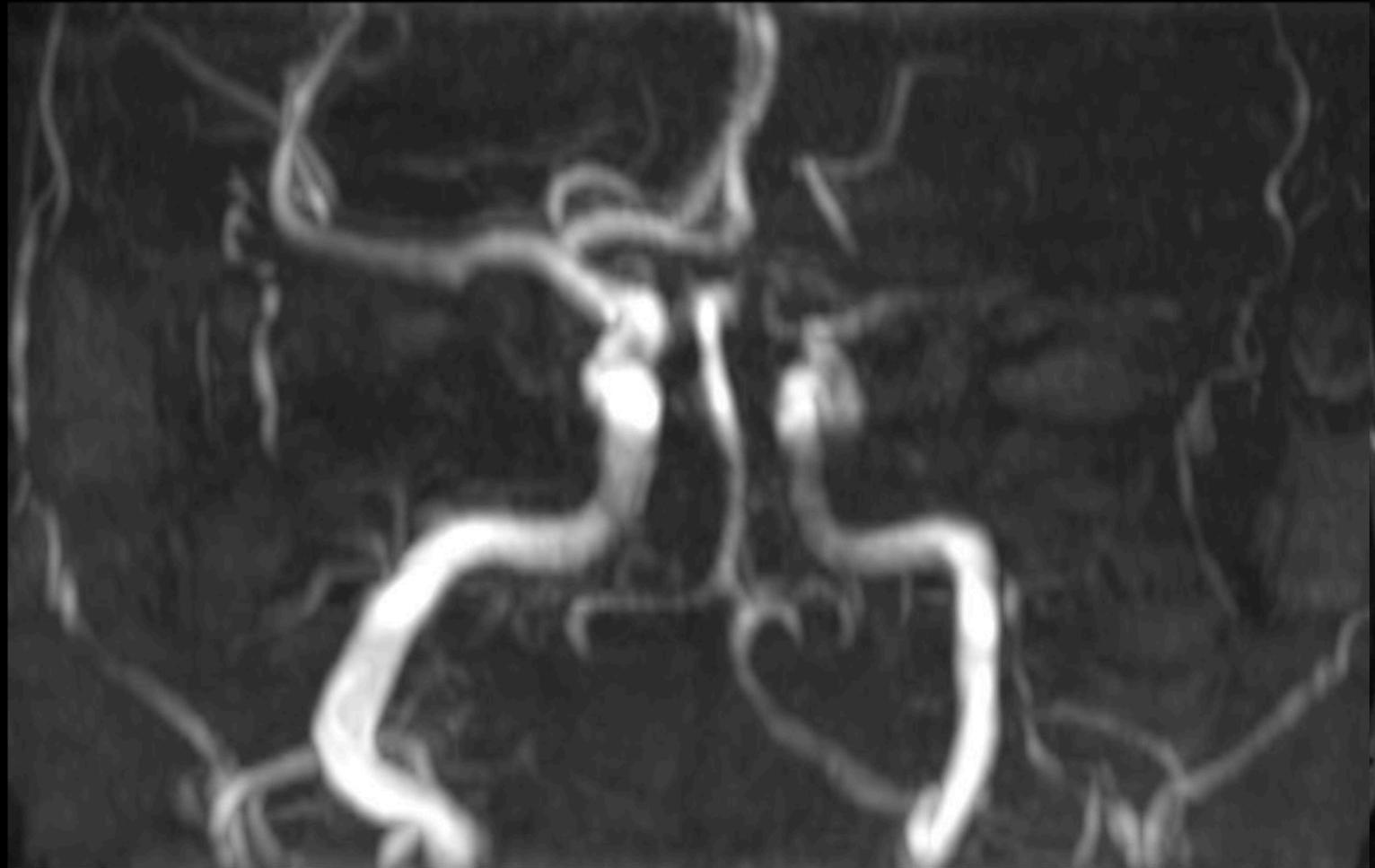


P

A

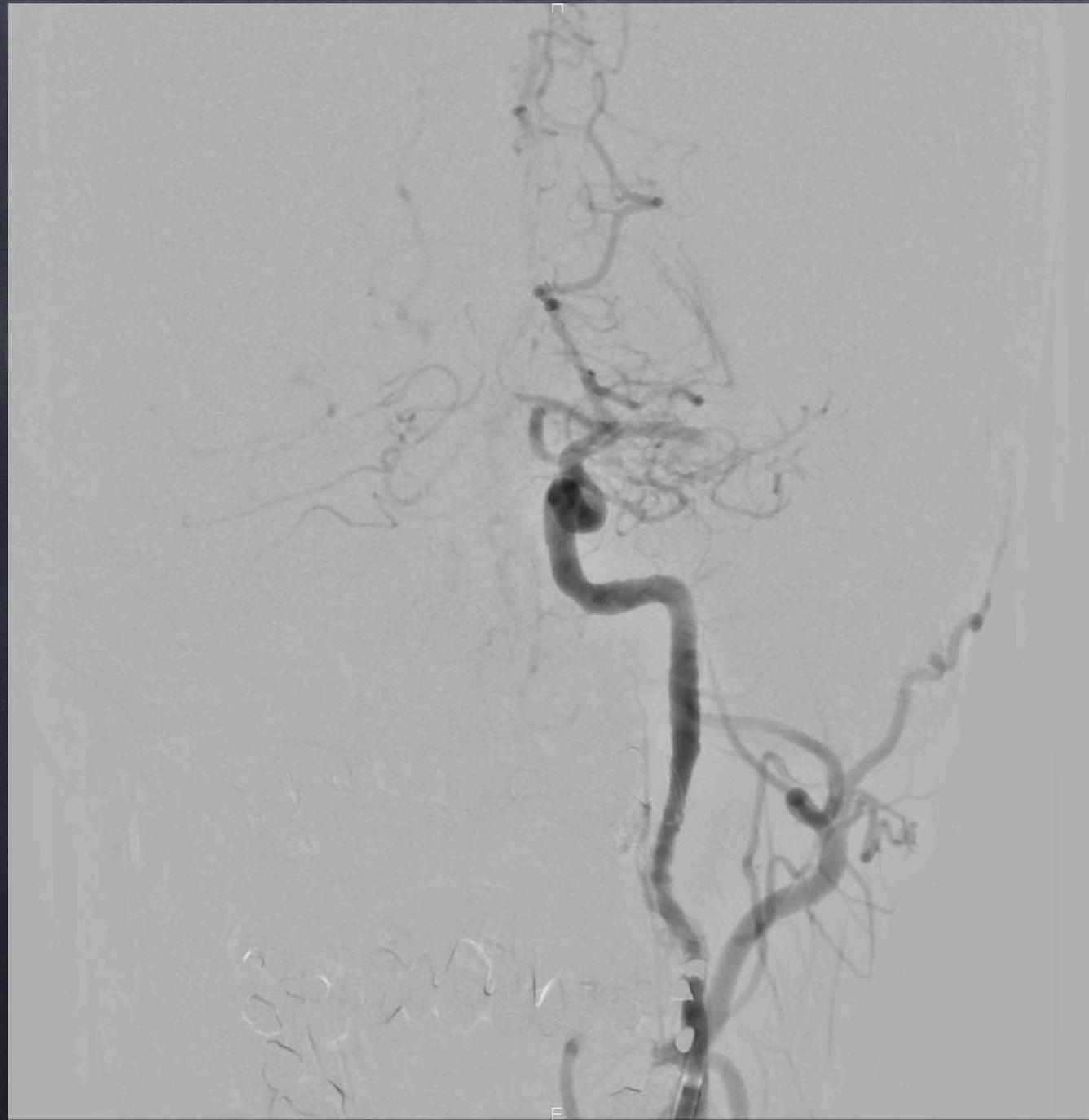


H

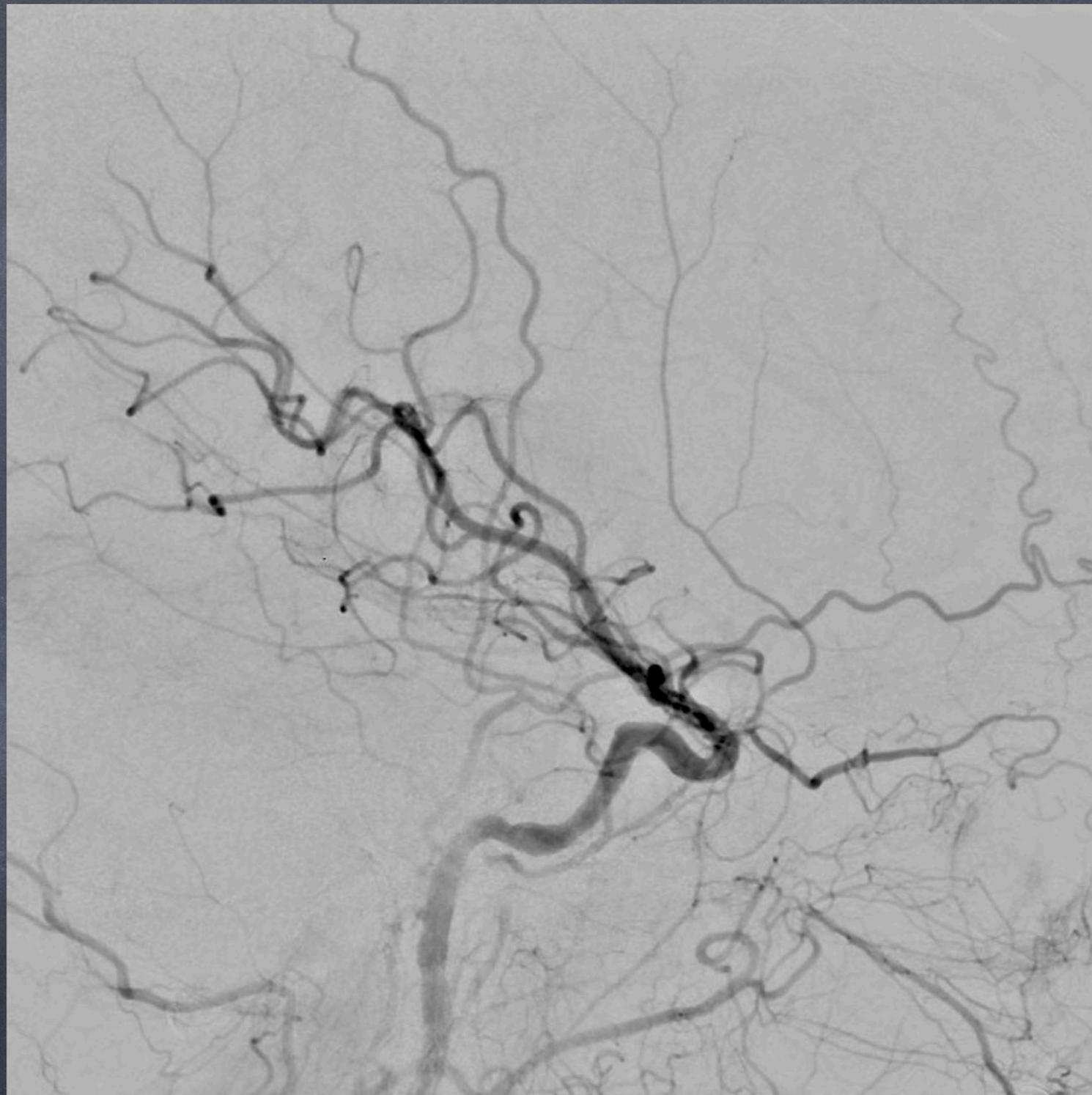
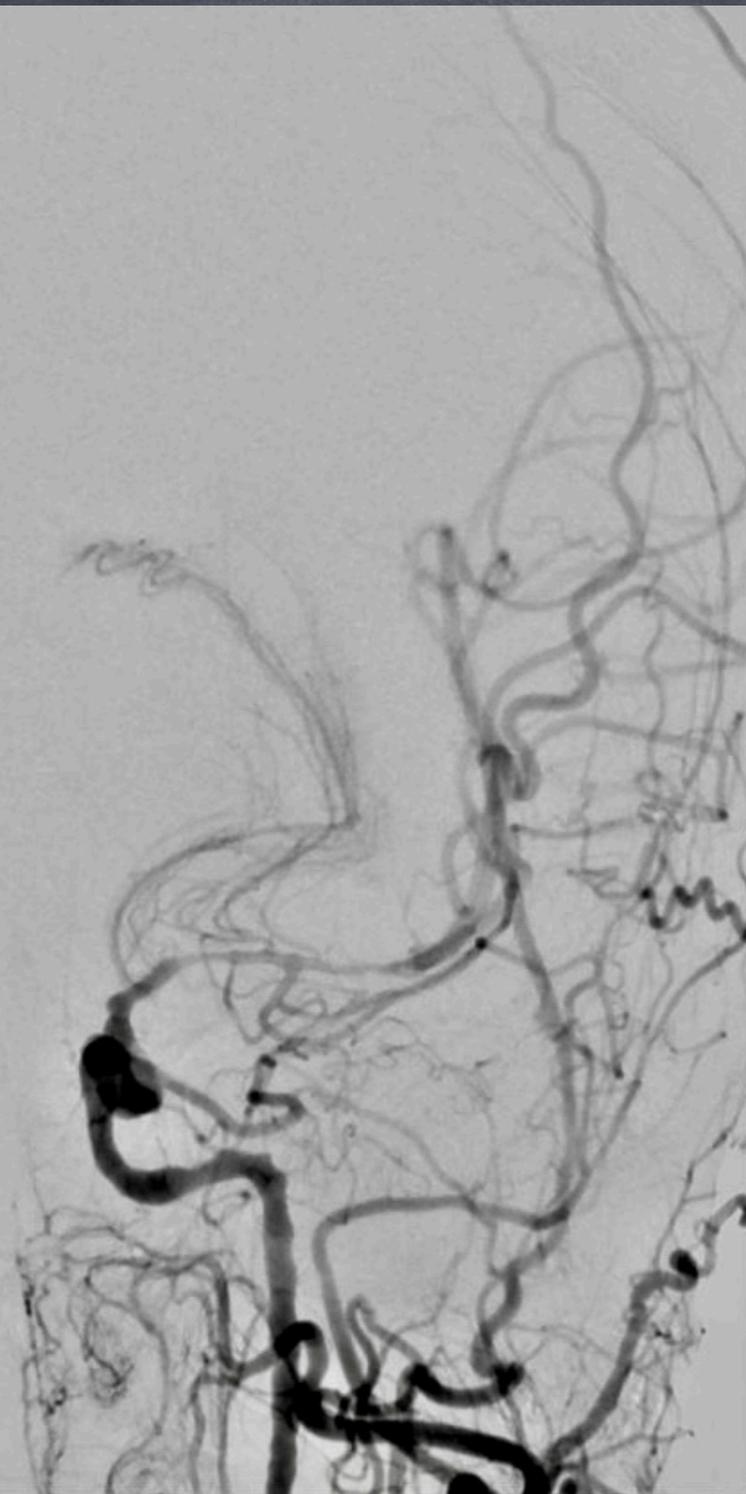


F

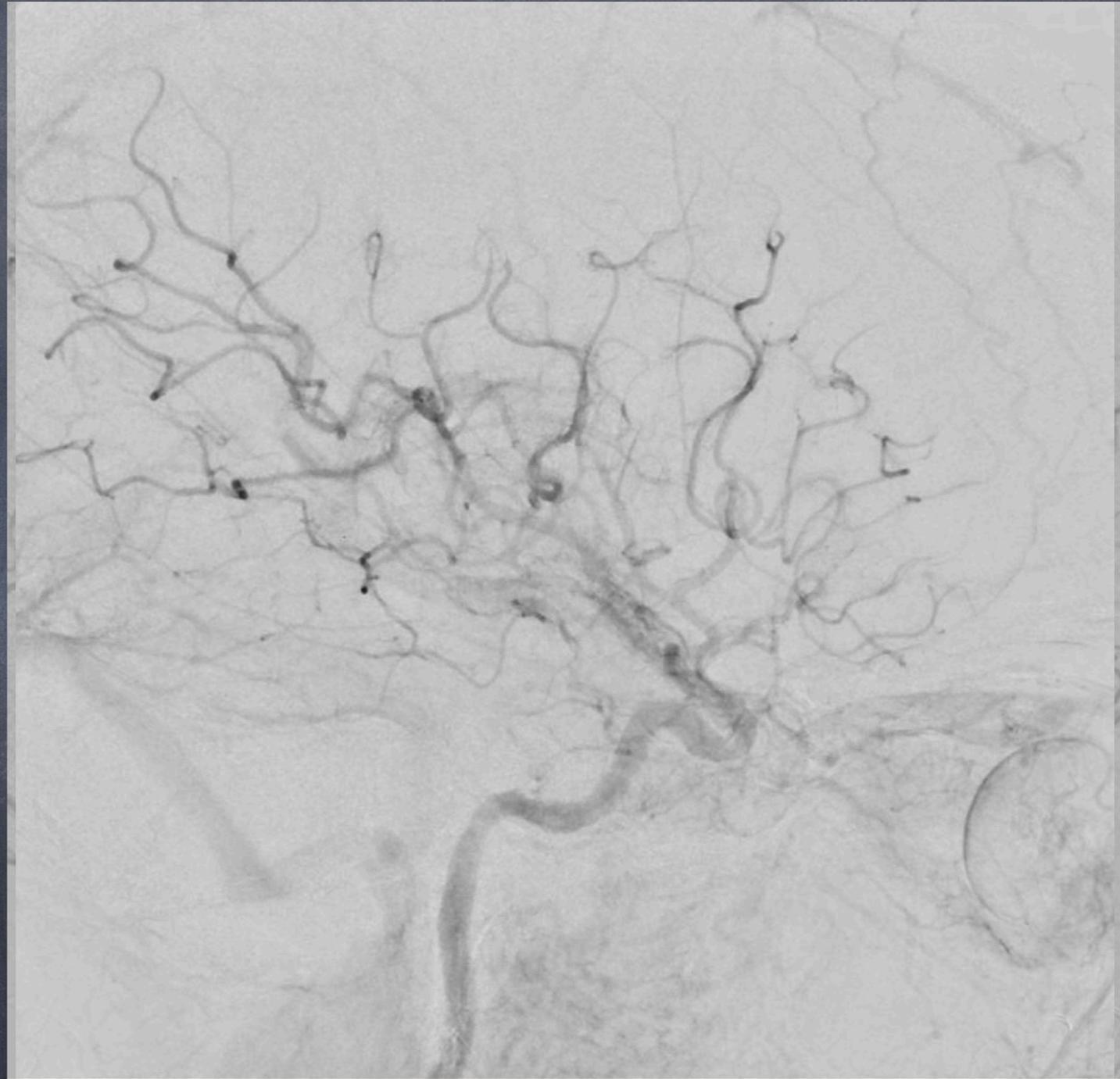
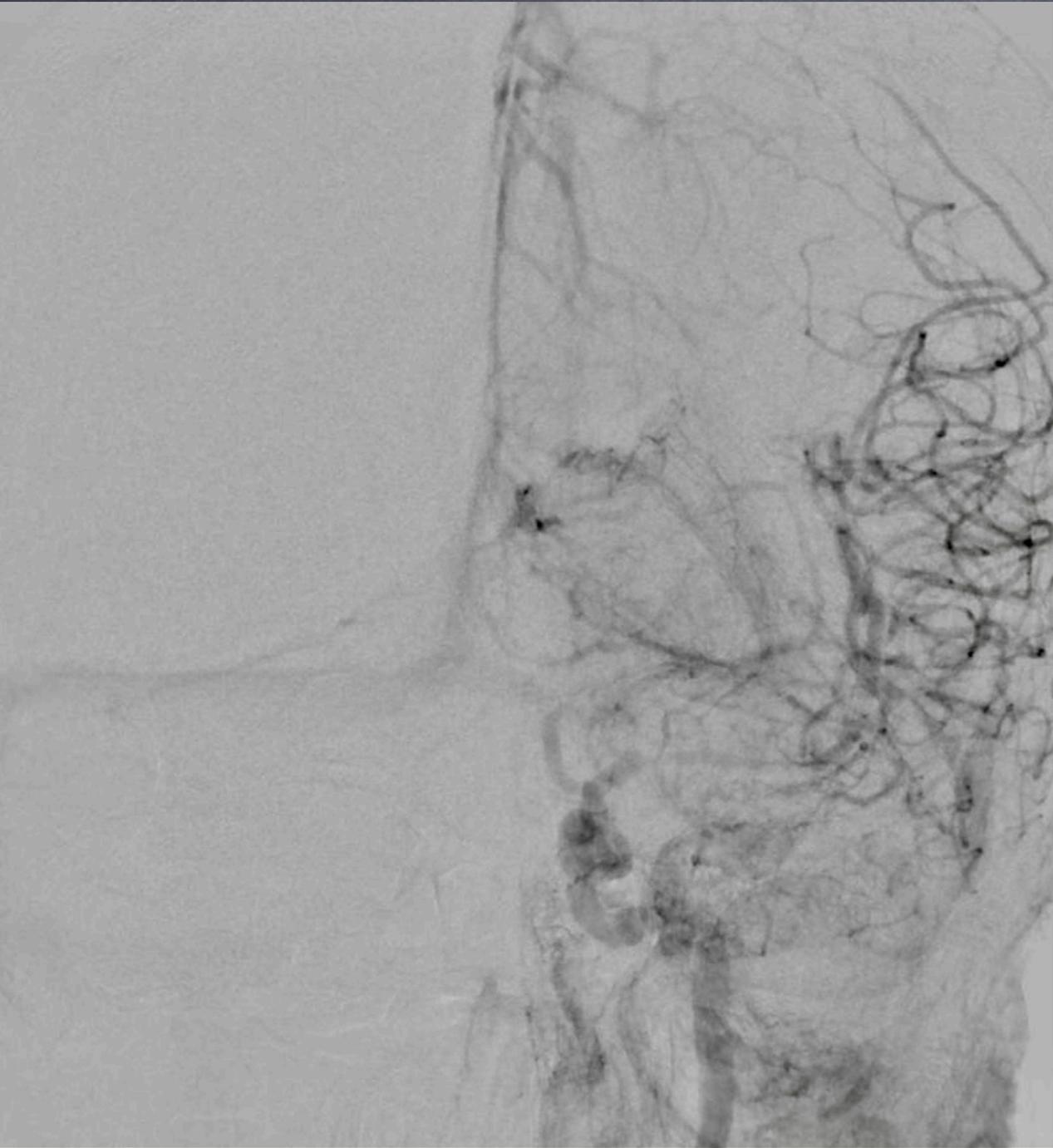
P



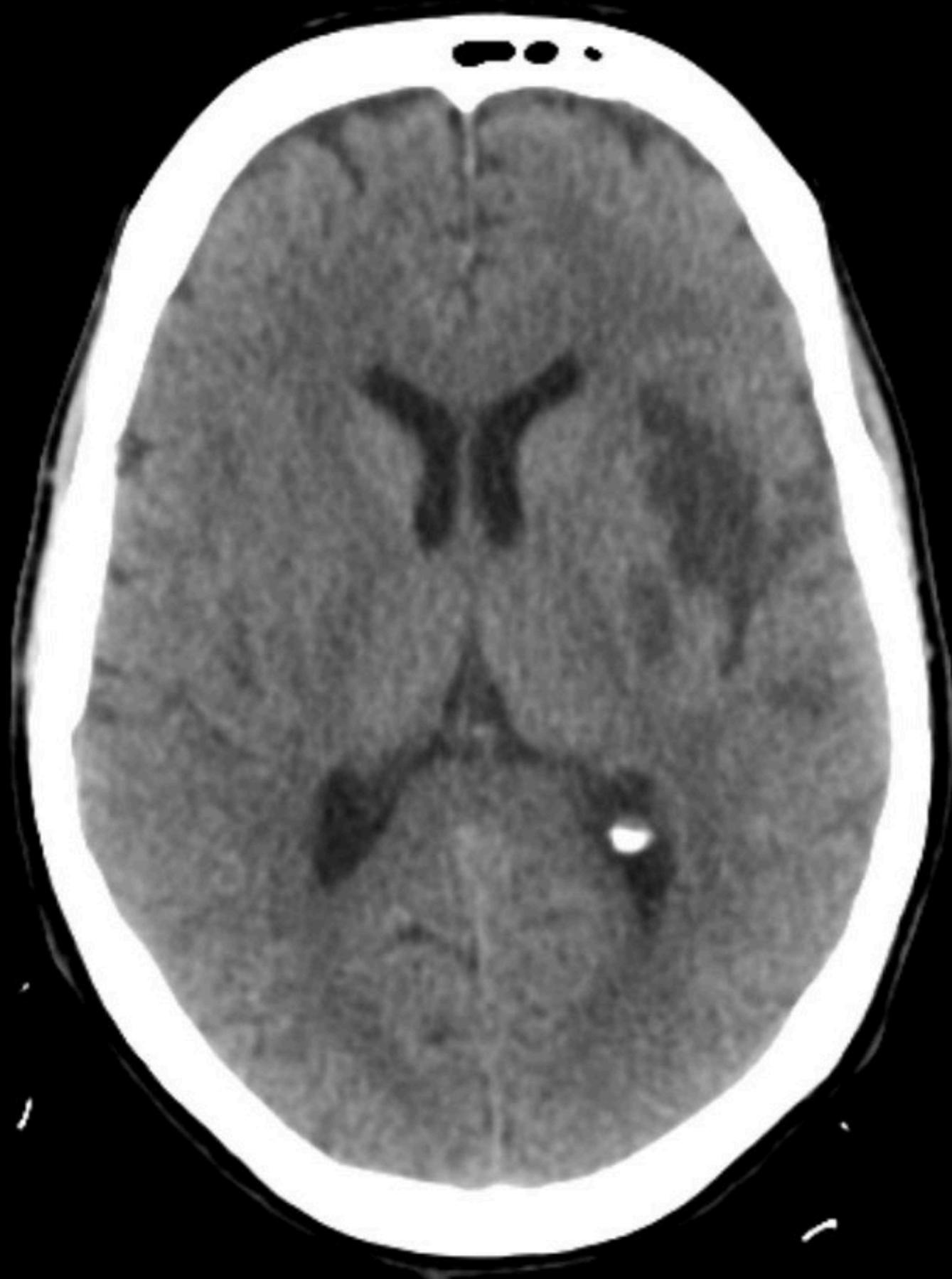
Après 1er Passage



Après 2mg Nimotop

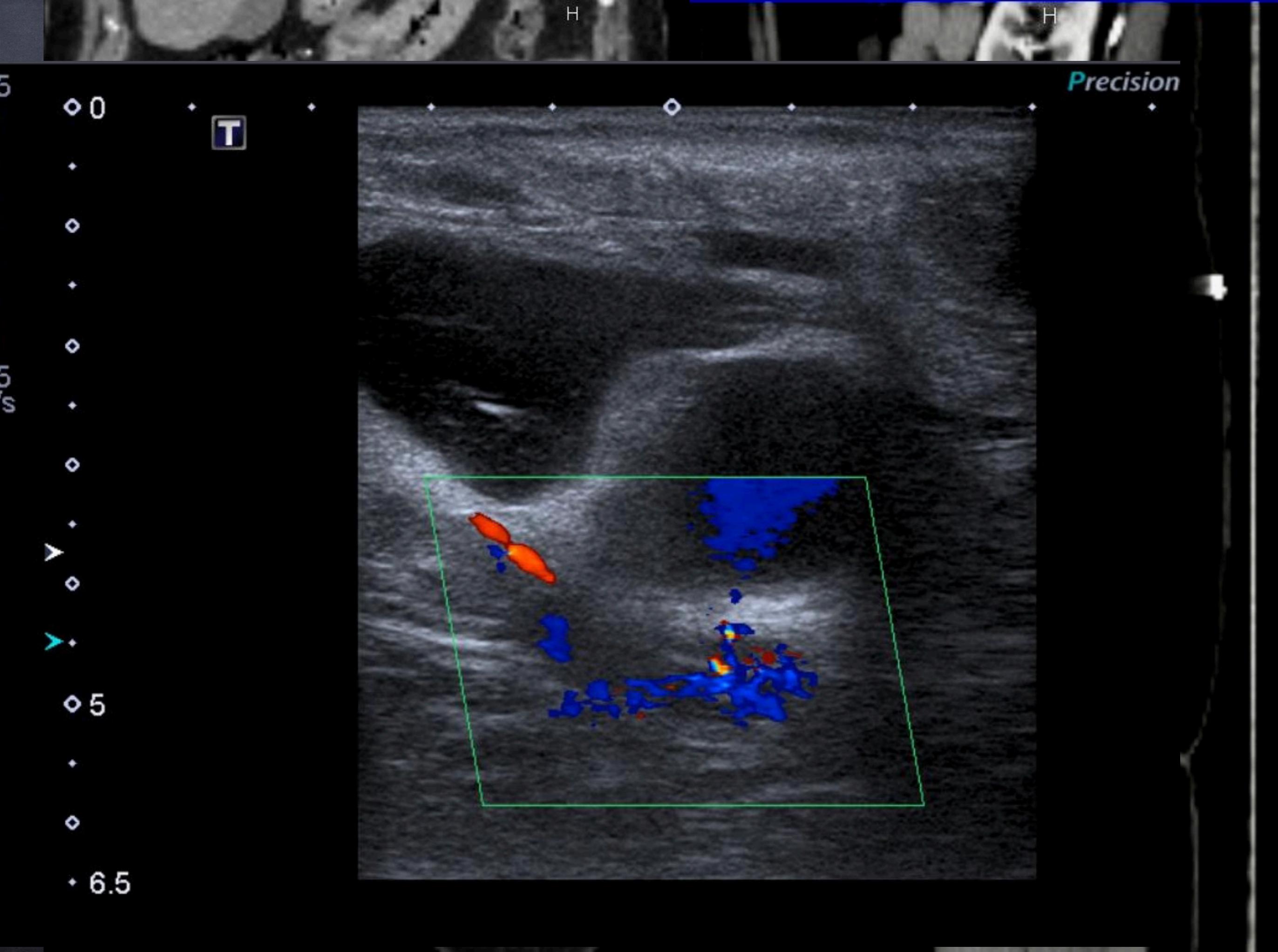


A



Faux Anévrisme

- Compression manuelle +++, sac de sable,
- Compression à l'aide de l'échographe
- Stent couvert
- Chirurgie
- Injection de thrombine FloSeal



Precision

T

0

0

0

0

0

5

6.5

H

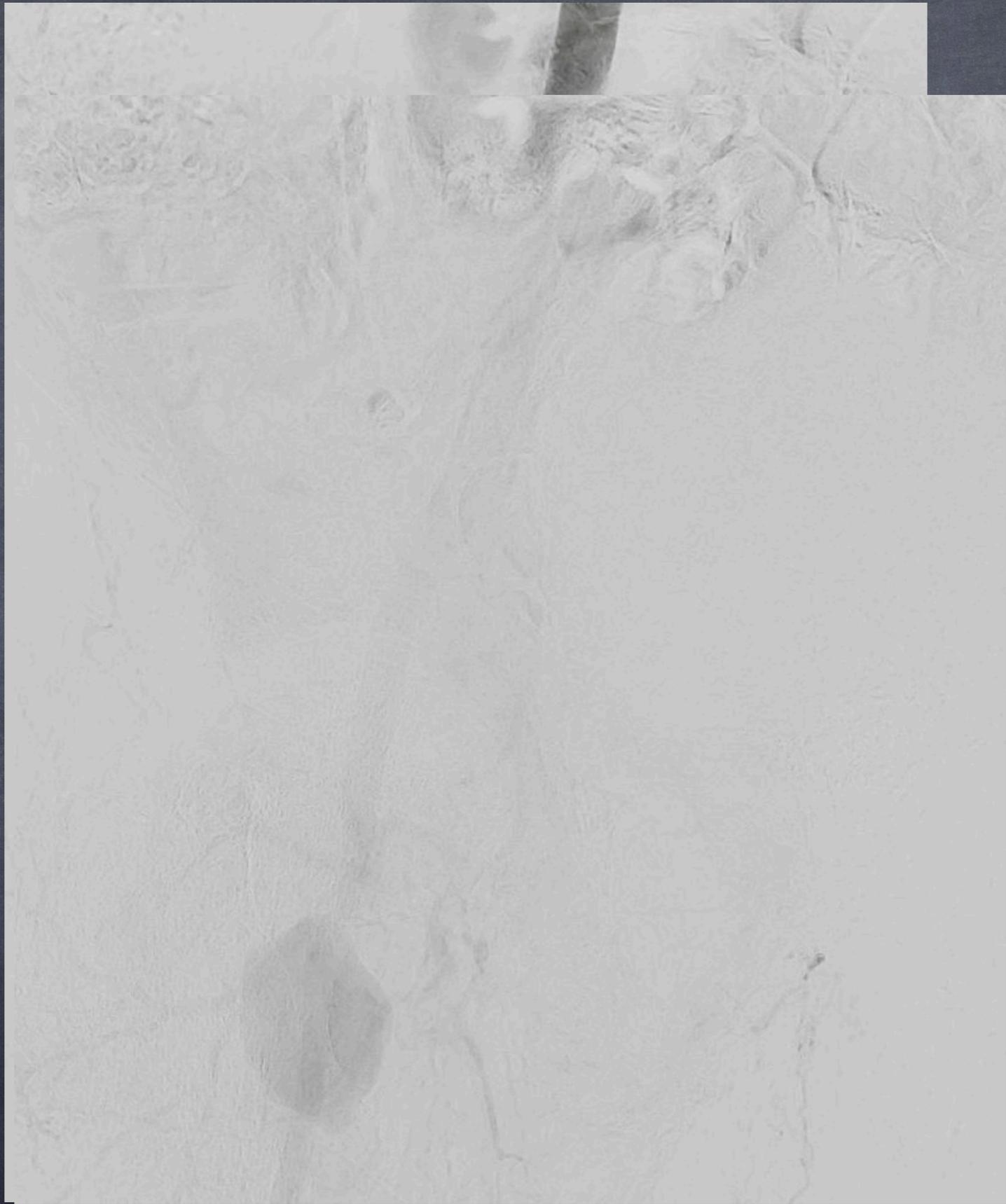
H

5

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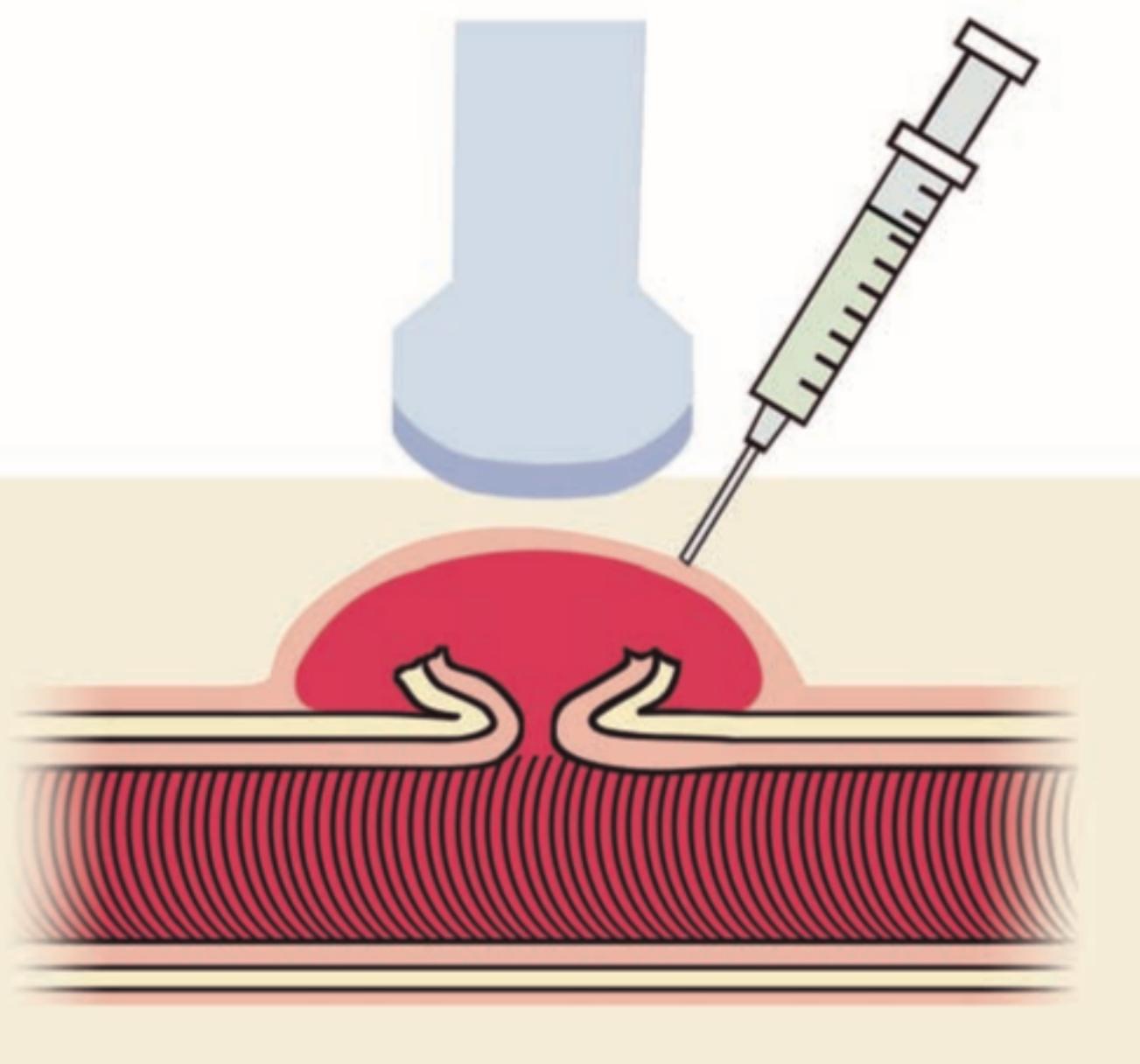
Y

Y









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Conclusion

- C Hémorragiques
- Avoir du matériel (ballon, coil)
- Du Matériel Humain
- Garder son calme

Conclusion

- C Ischémiques
- Méfiance T carotidien et tandem
- TICI 3 à tout prix?

Conclusion

- Dissection / Vasospasme
- Patient jeune
- Faisable x raisonnable
- Etudier carotide contra latérale

Merci de votre attention

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