

Prof. Tommy Andersson, MD, PhD

Karolinska University Hospital
Stockholm, Sweden

AZ Groeninge
Kortrijk, Belgium



Disclosures TA

Consultant:

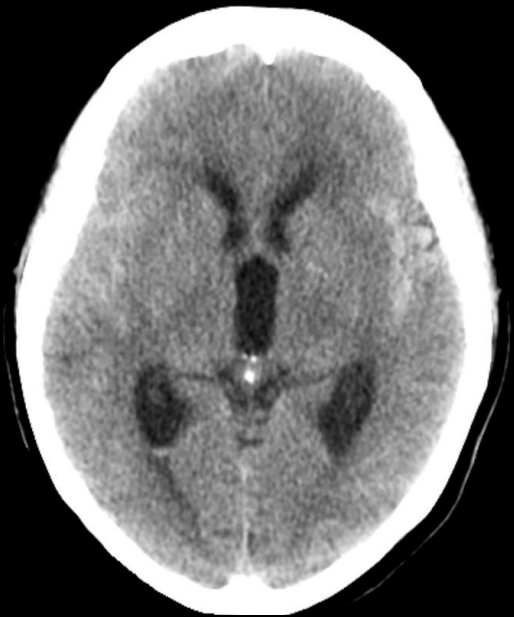
- Ablynx
- Amnis Therapeutics
- Codman
- Medtronic
- Neuravi
- Rapid Medical
- Stryker

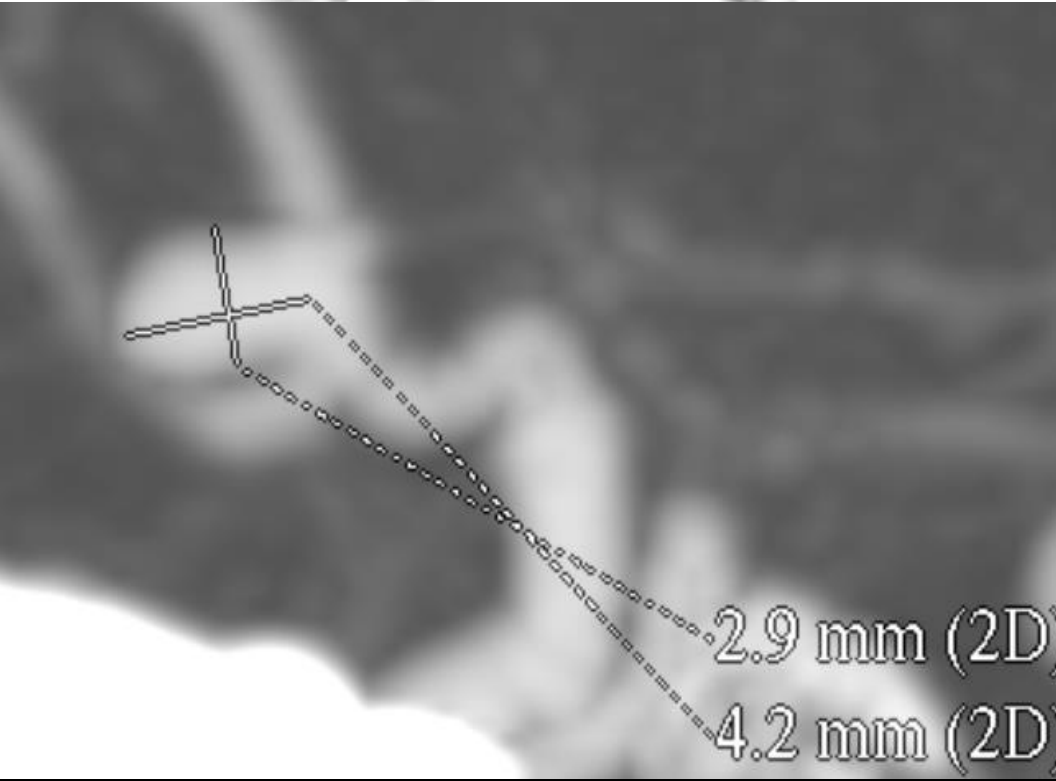
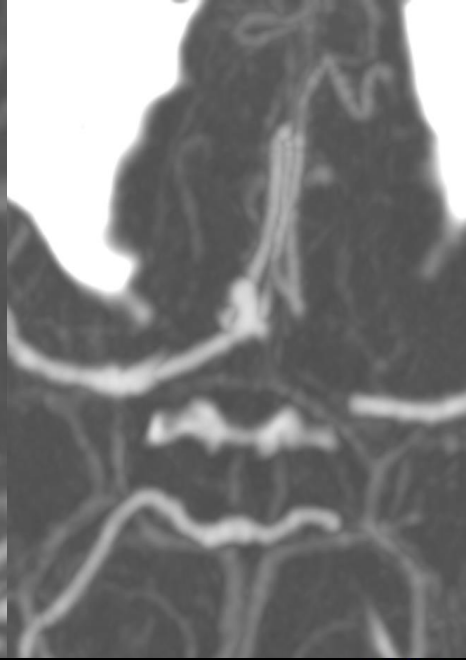
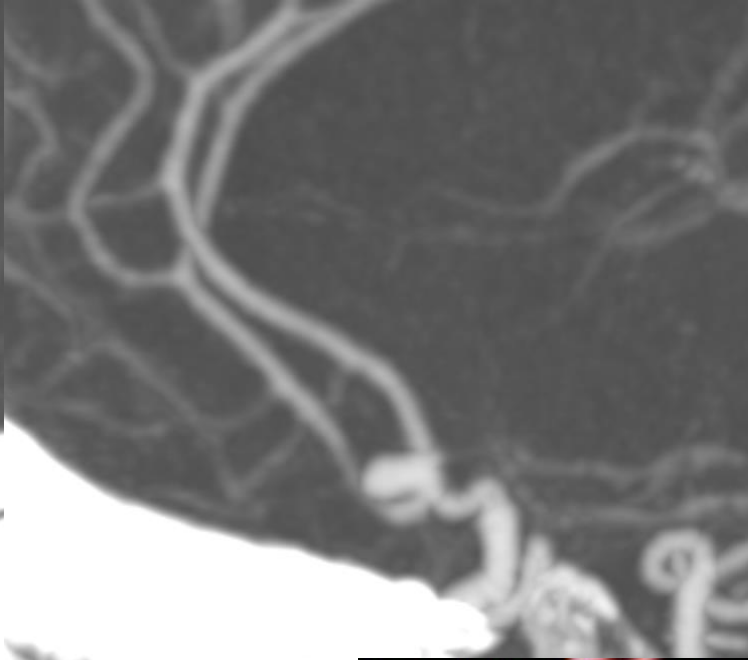
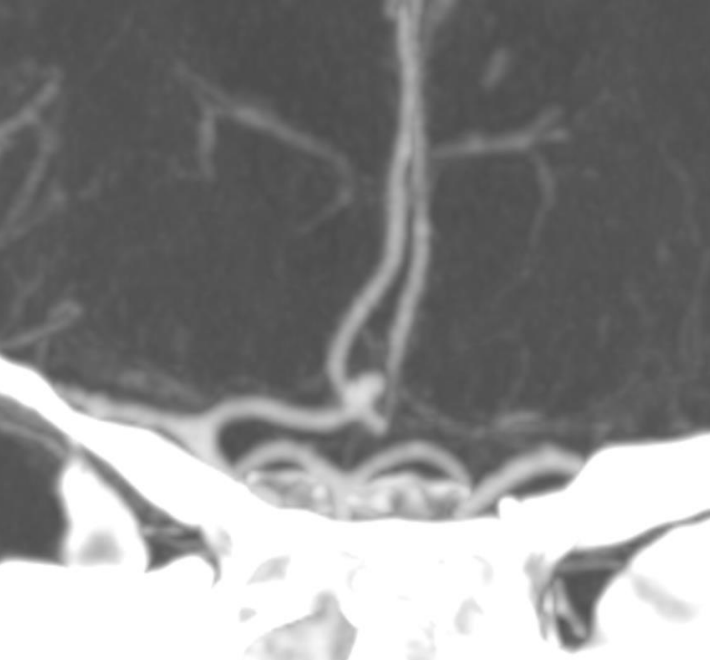
Case 1: 53 yo female

- Other country: sudden headache, nausea, LOC
- Did not seek medical attention – travel
- 5d later, still headache, no focal deficit
- Admitted to Karolinska
- CT and CTA

CT and CTA

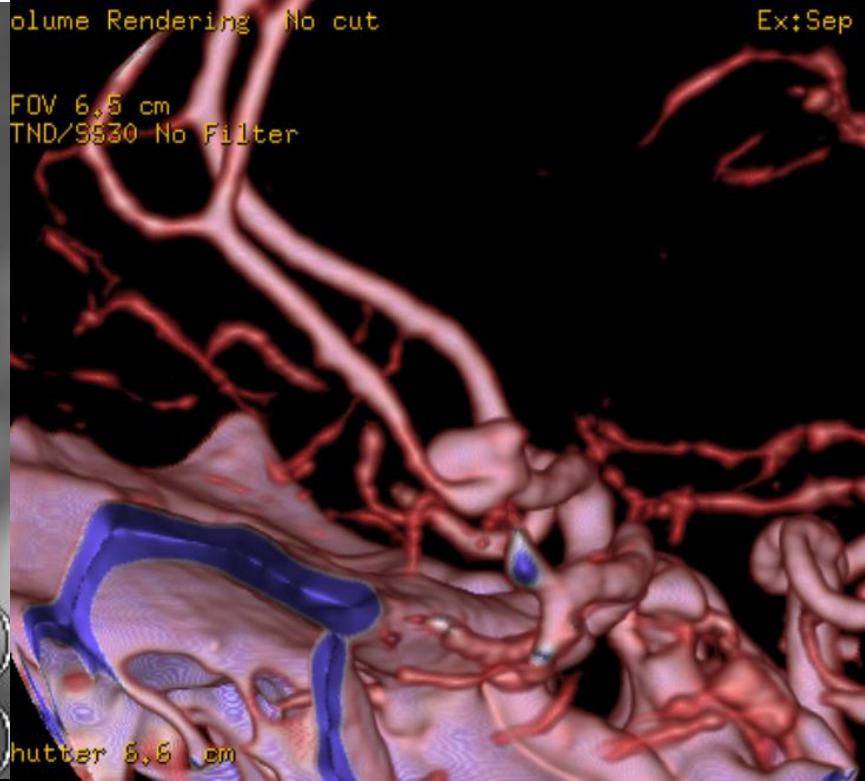
- SAH – bilateral blood in Sylvian fissure + LVs and 4th ventr – Fisher gr 4
- Hydrocephalus
- Bilobular AcomA aneurysm, 6 x 4 x 3 mm
- No A1 left





2.9 mm (2D)

4.2 mm (2D)



Volume Rendering No cut

Ex:Sep

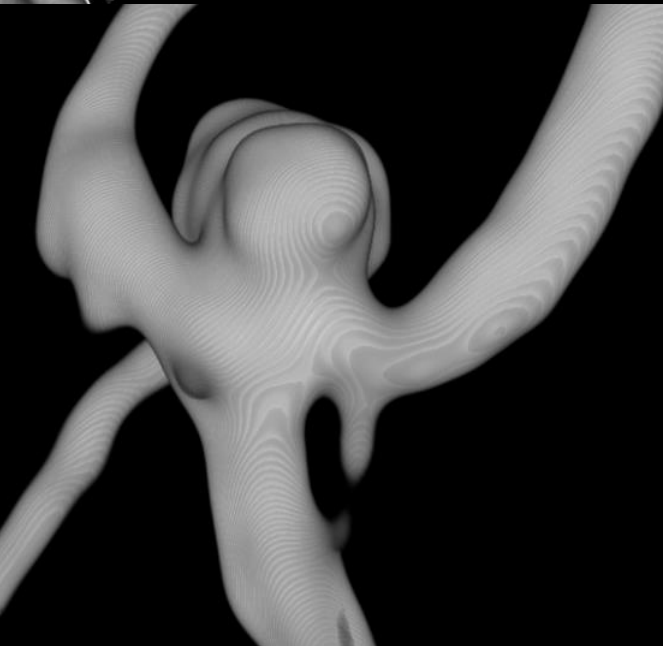
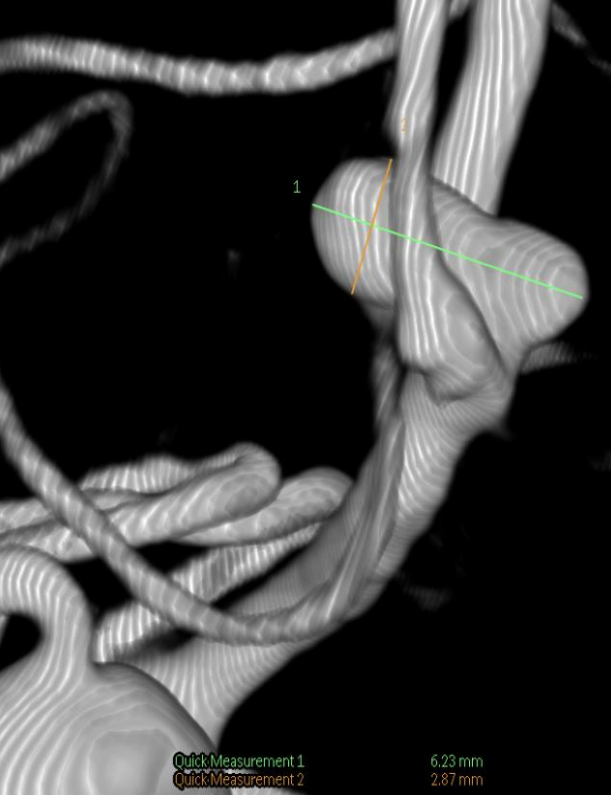
FOV 6.5 cm
TND/9530 No Filter

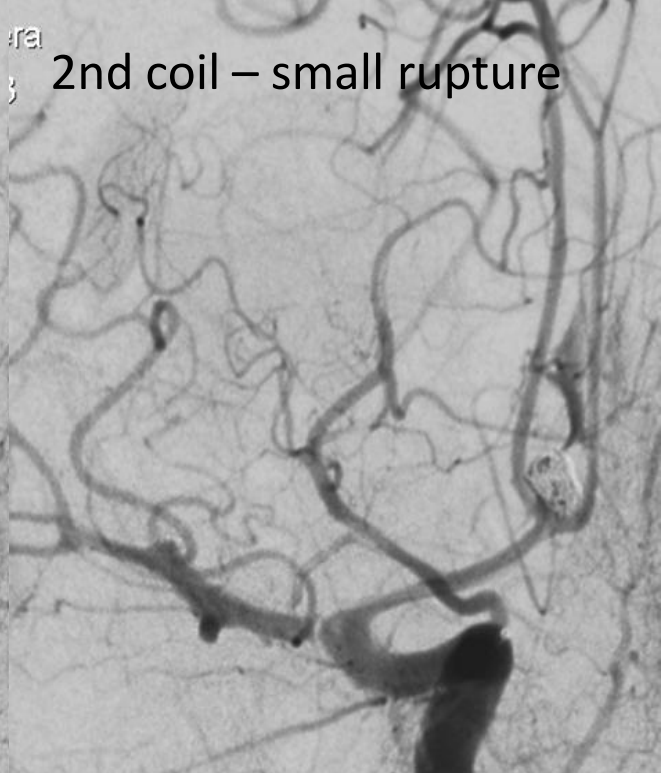
hutter 6.5 cm

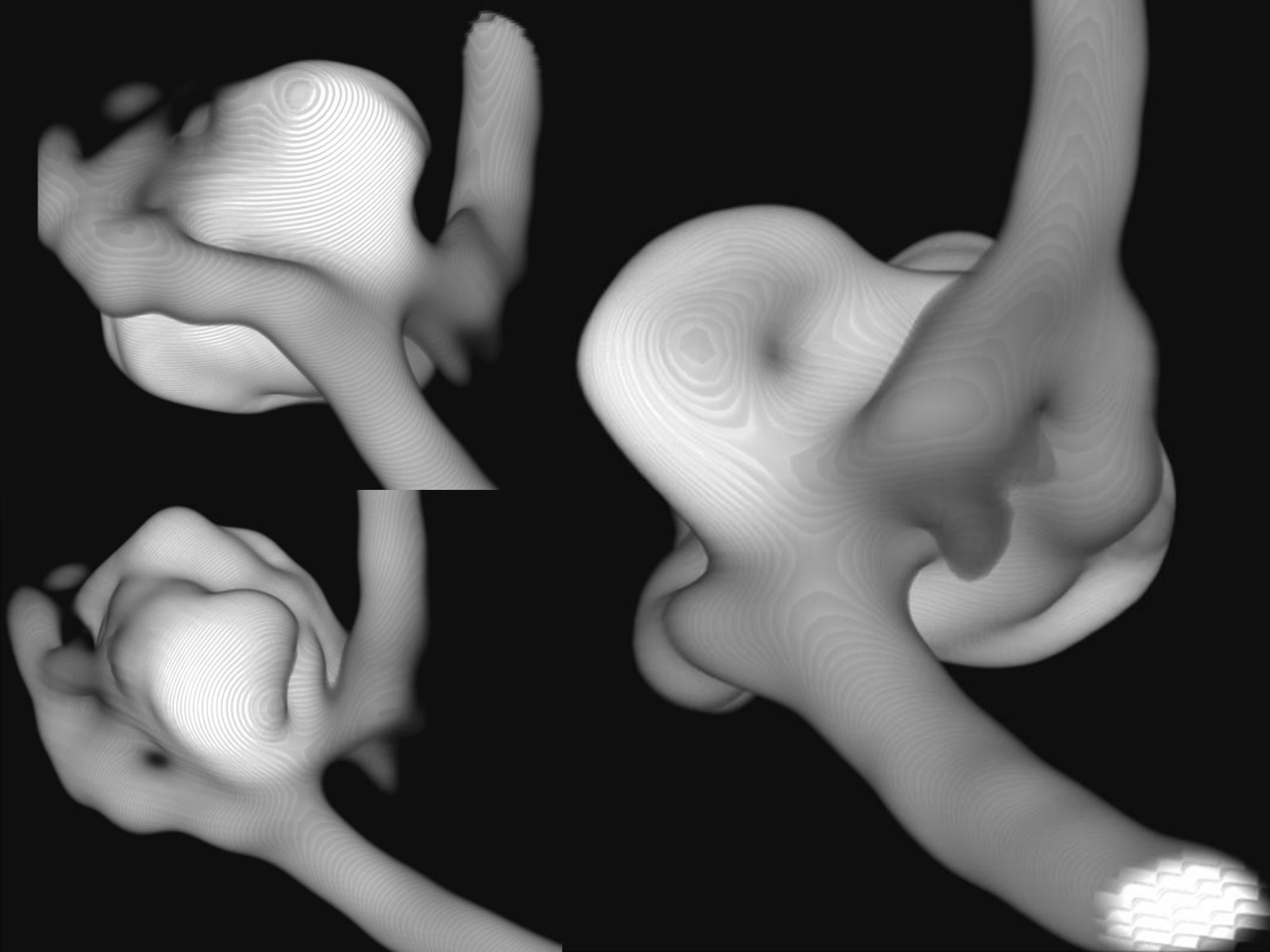
Decided to coil

- GCS 4 + 6 + 4 = 14 – no EVD
- Hunt & Hess = 2
- WFNS = 2

- Heparin
- 7F 80 cm Arrow sheath
- 7F Guider Soft-tip
- MC SL-10
- Microplex Cosmos and Hypersoft
- Prepared for balloon, not used – risk for vasospasm







Röter -90°
2011528748
Vinkel 0°
FD 31 cm

kalkova, Vera
Röter -90°
2011528748
Vinkel 0°
FD 31 cm

C: 512.0, W: 100

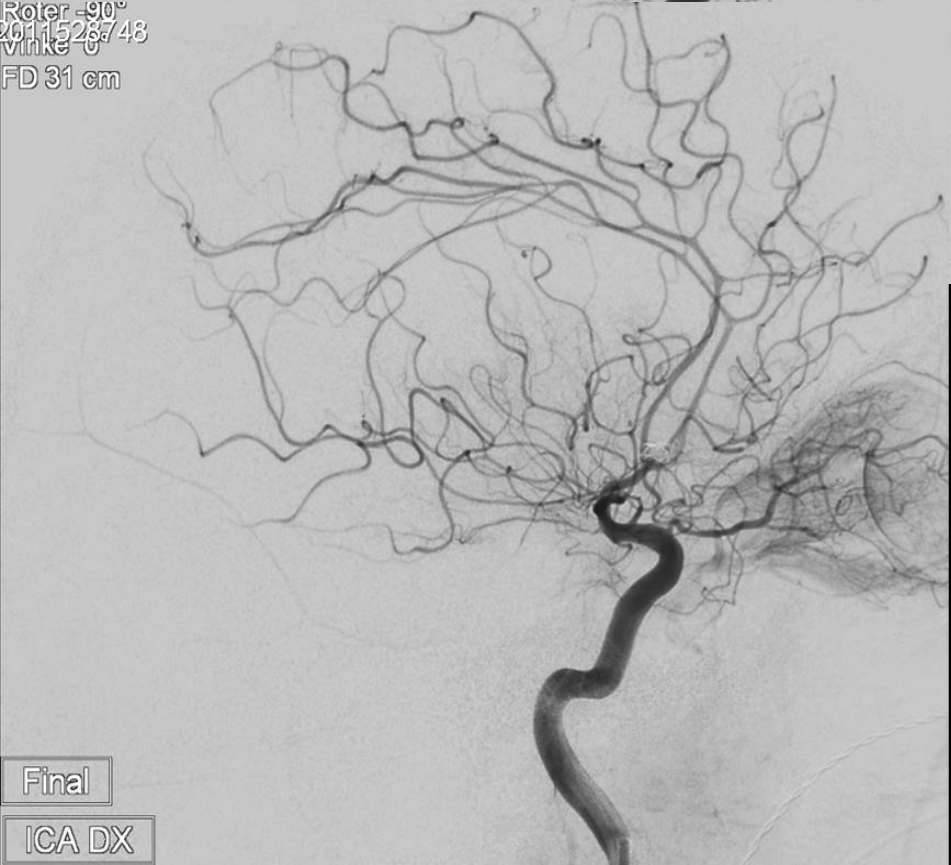
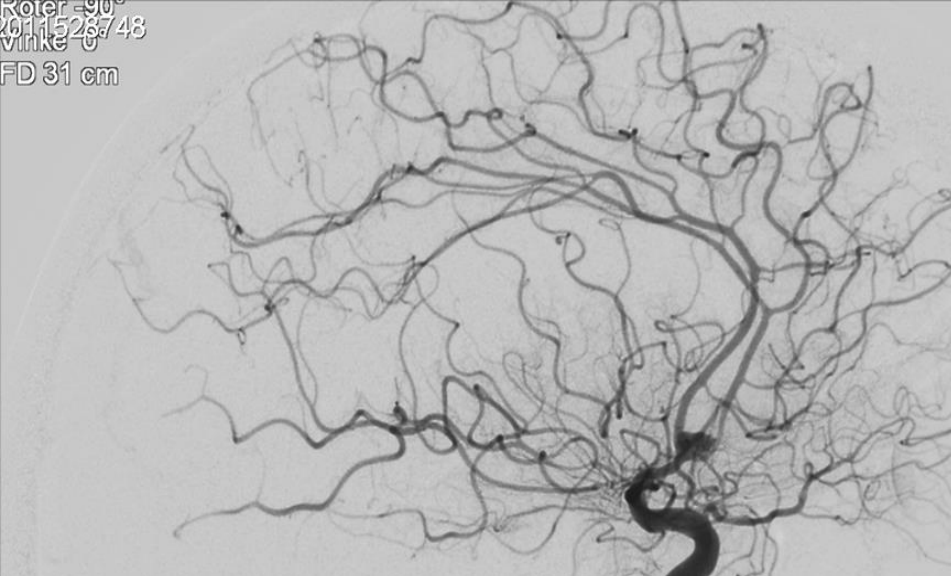
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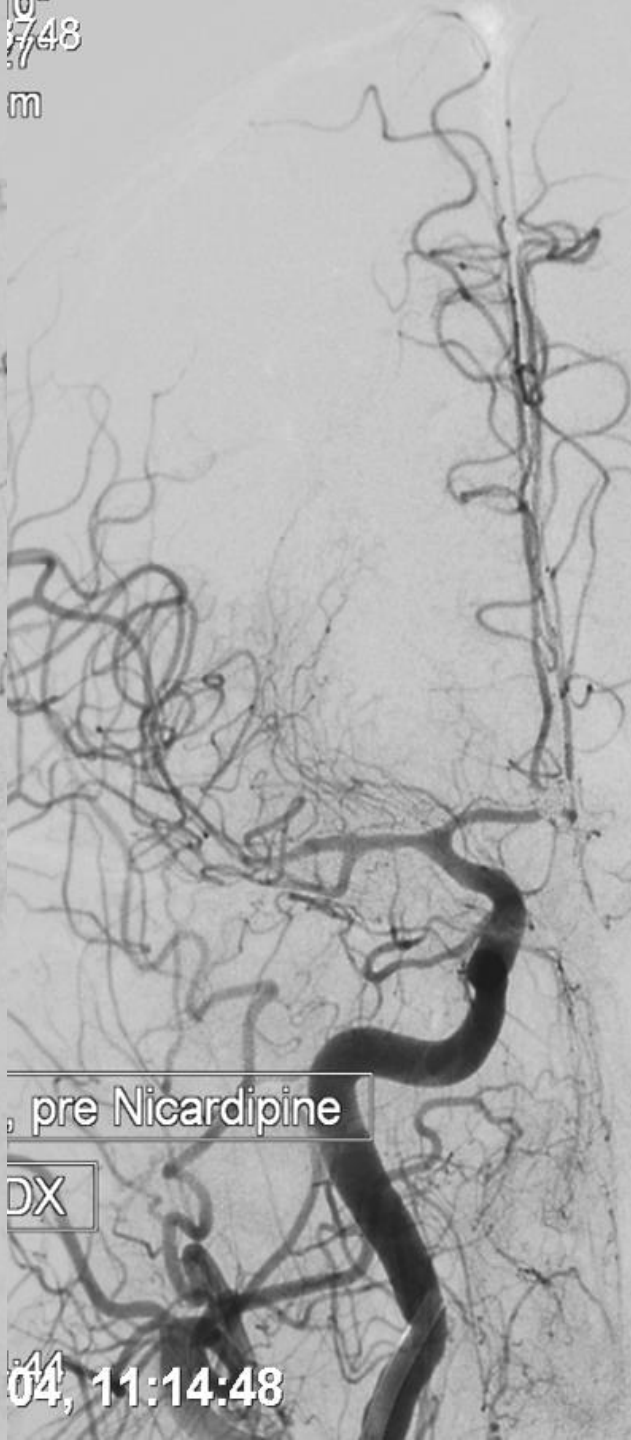
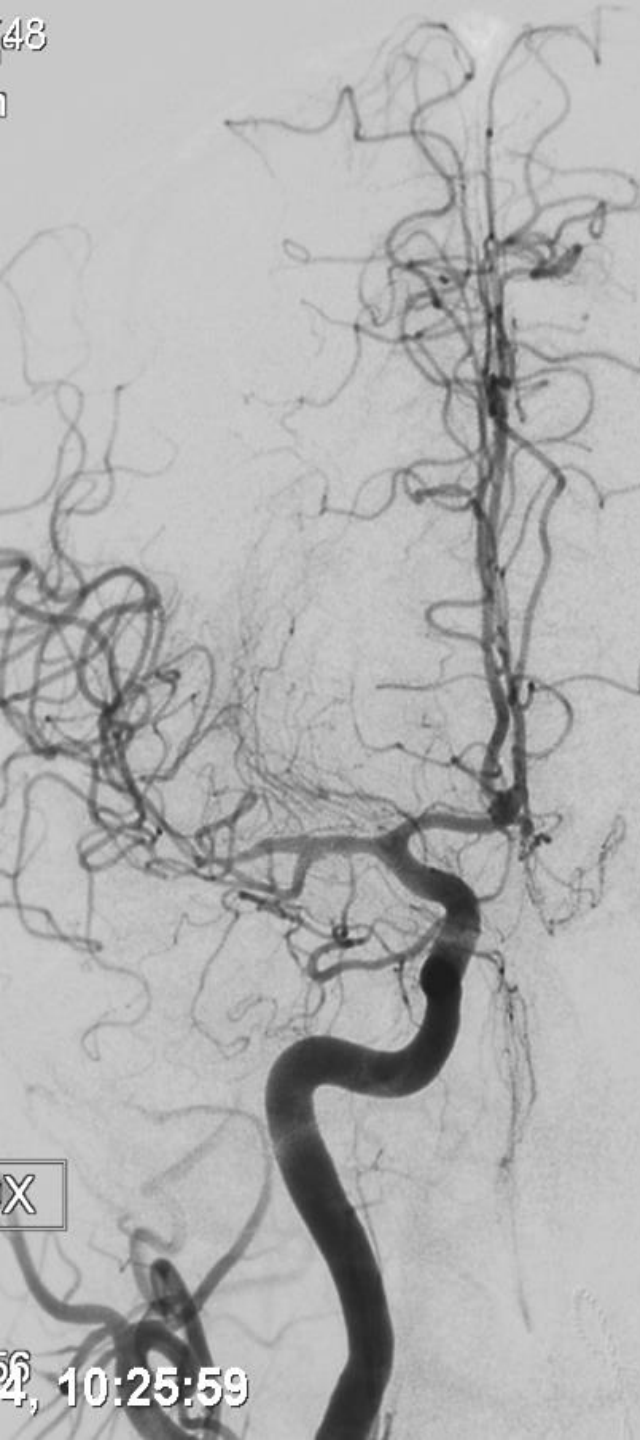
Final, pre Nicardipine

10 mg Nicardipine was given after coiling due to vasospasm

Final

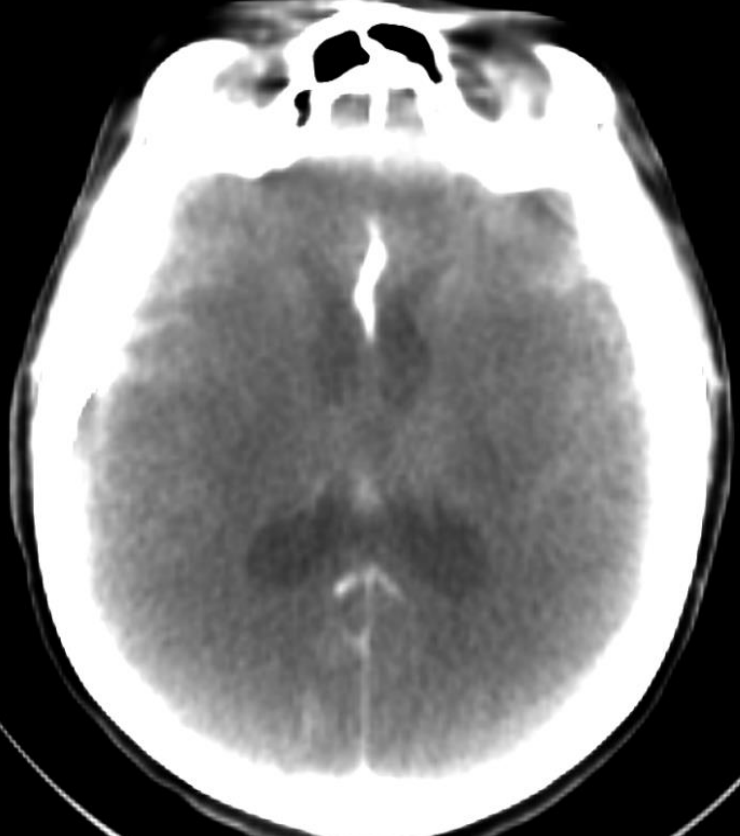
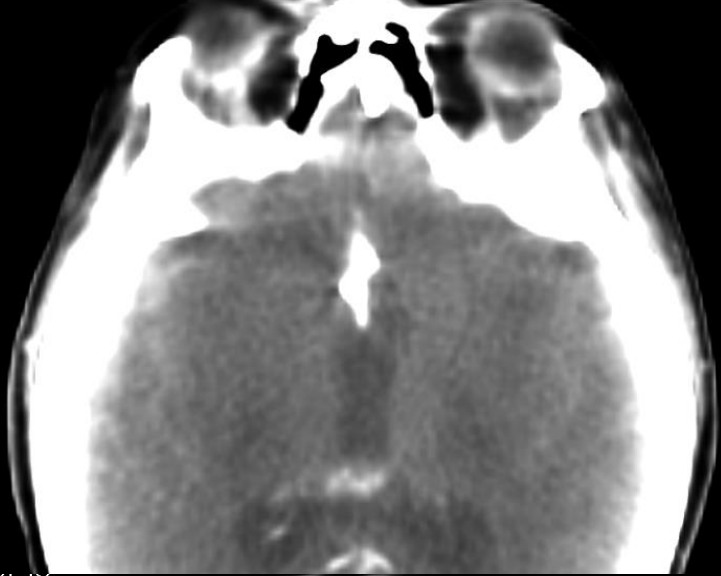
ICA DX





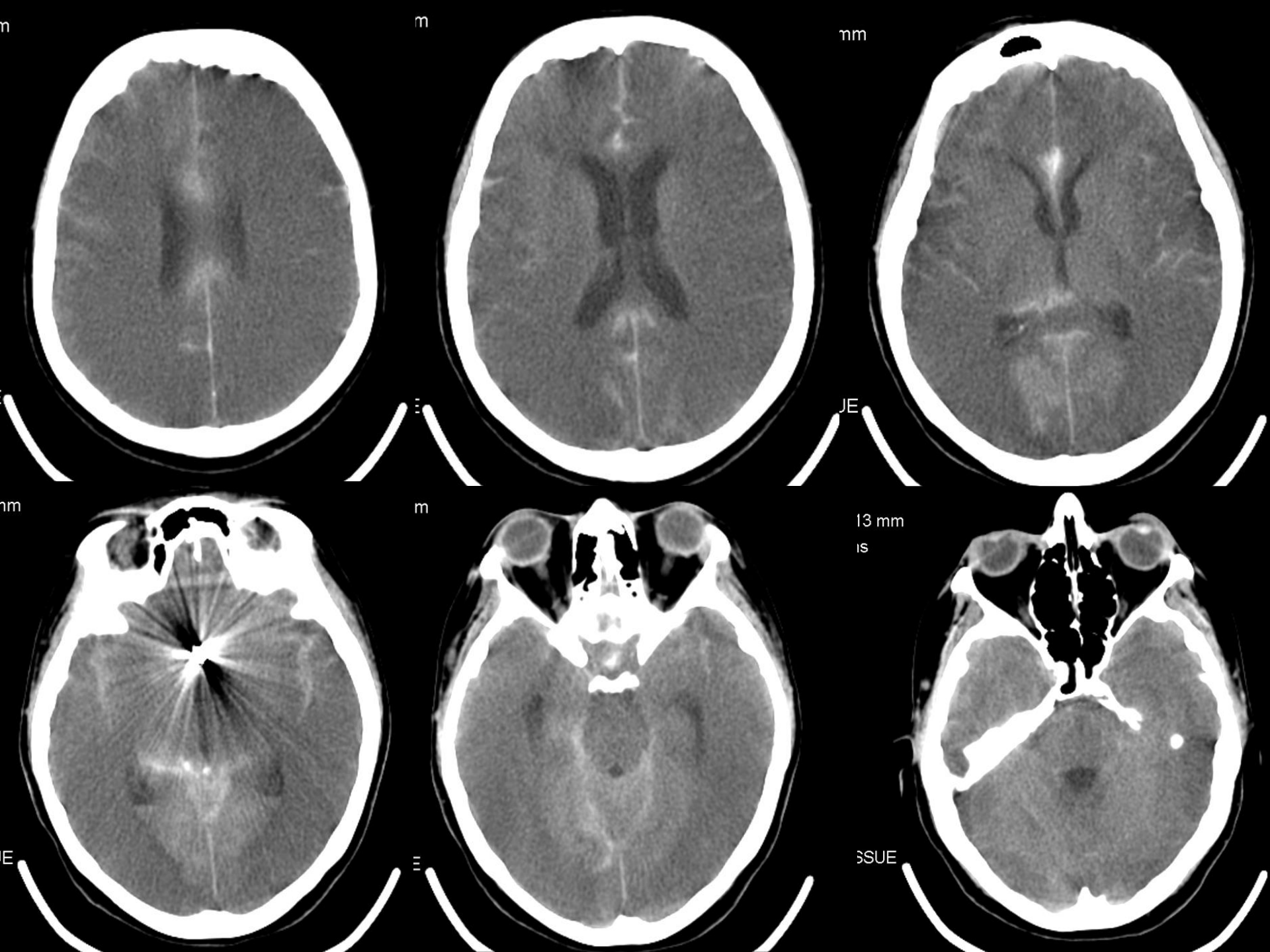
Post procedure

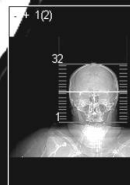
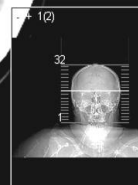
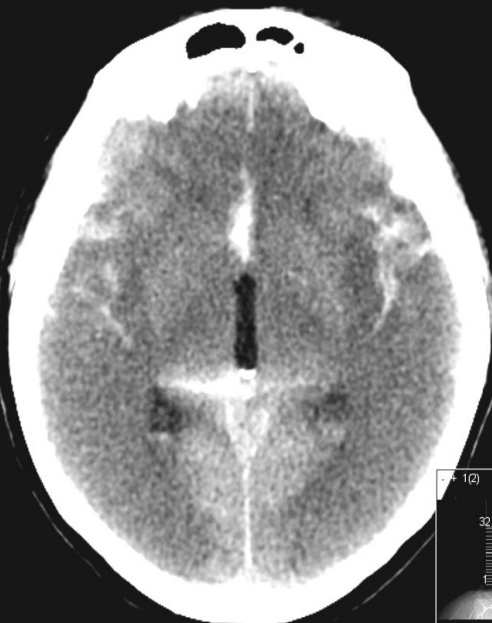
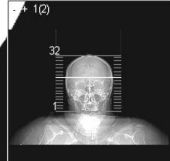
- Reasonably good result
- XperCT showed some blood/contrast in interhemispheric fissure as expected
- Circulatory stable
- Pt went back to Neuro-ICU still intubated



3-4 hours later

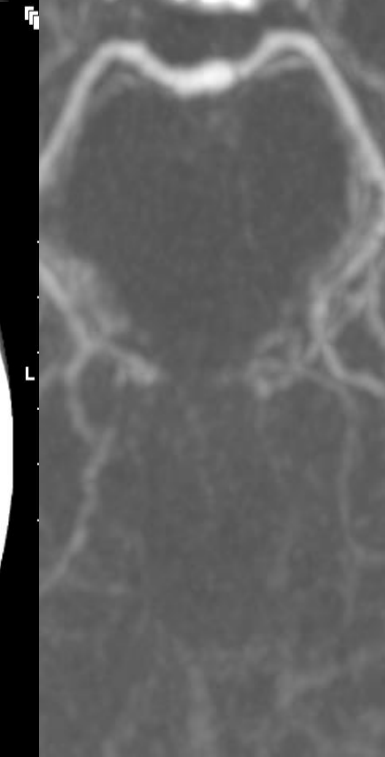
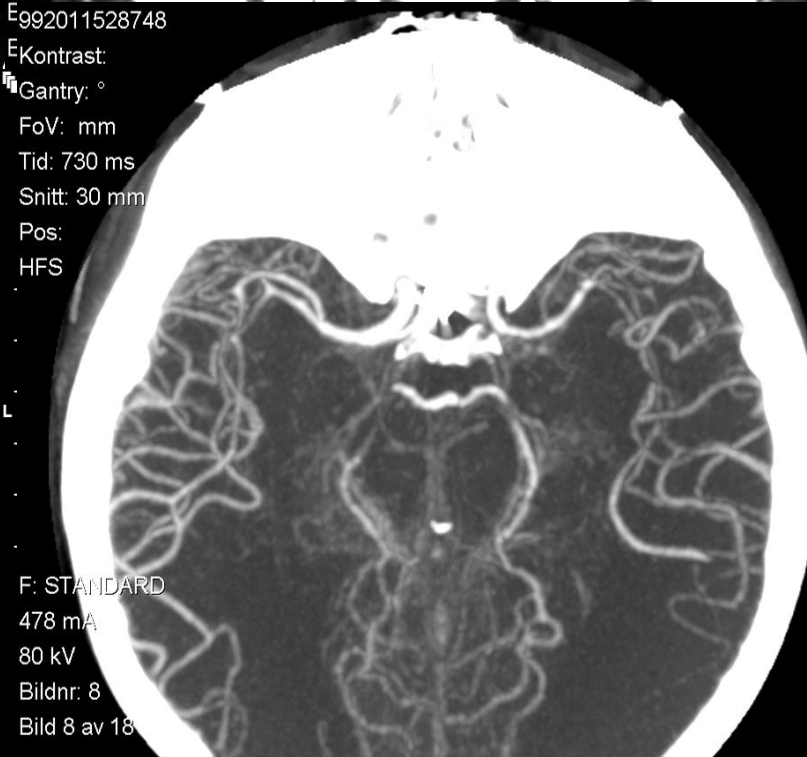
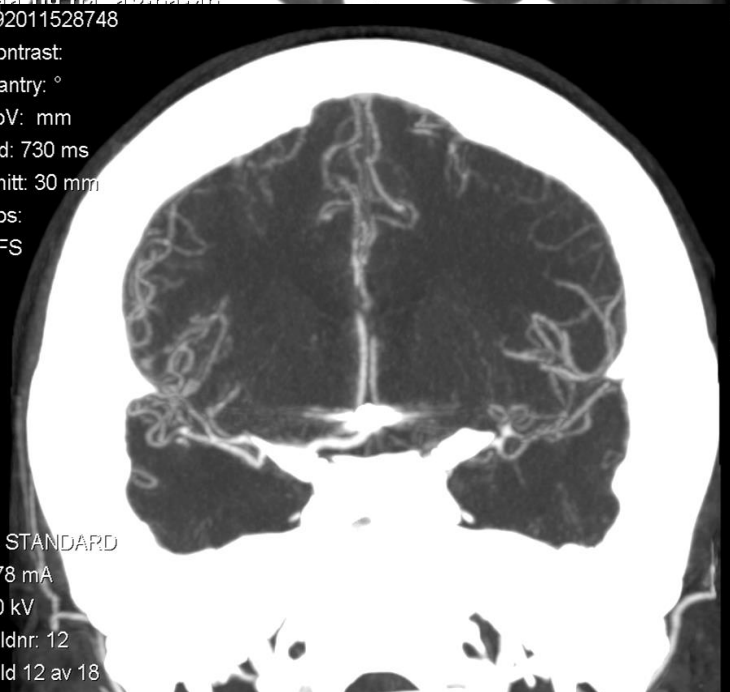
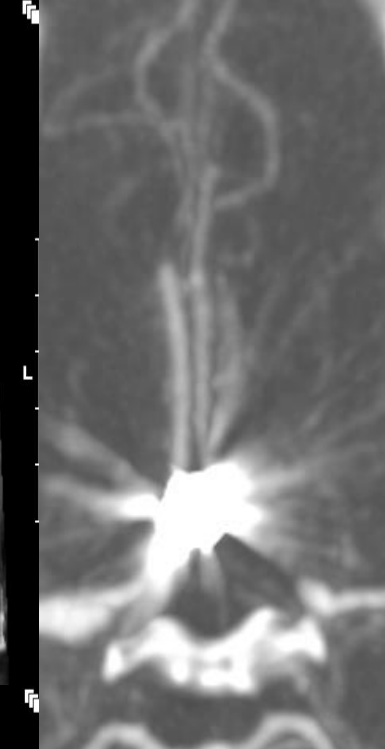
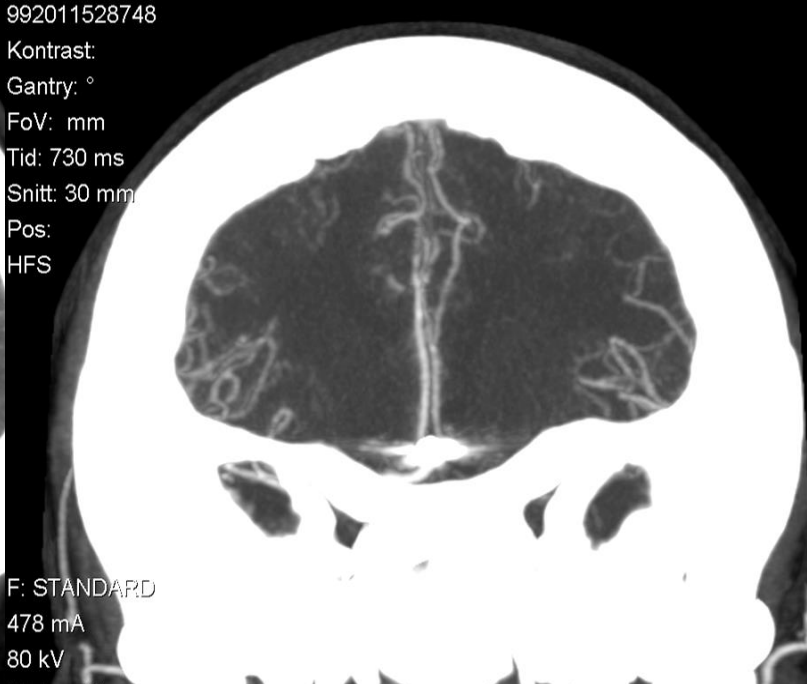
- Called from N-ICU: difficult to extubate, extension pattern, sunset
- GCS 3-4!
- CT at N-ICU (8-slice): blood interhemispheric fissure, ambient cistern, *large hypodens bicortical areas, compressed gyri!*
- Signs of global ischemia confirmed on regular CT





CTA

- Slight to moderate vasospasm – mainly left MCA



Clinical course

- EVD considered but declined
- Pt remained GCS = 3
- 3 days later aortocervical angio revealed no remaining intracerebral circulation – pt declared dead

Discussion – explanation?

- Allergy against Nicardepine?
- Peripheral vasospasm?
- Hypotension during coiling – ICP > MAP!
 - Systolic BP 90-100
 - Too low perfusion pressure (CPP)
 - Combination of hypotension, aggravated by nicardepine, and hydrocephalus with increased ICP, aggravated by small bleed, and some vasospasm

What can be learned

- Always use balloon when coiling ruptured aneurysms?
- EVD for monitoring and for the possibility of CSF diversion?
- Keep BP higher in pts treated late after bleed?