Case 2: knowledge and training

- You *need both* to successfully treat and avoid complications
- This is what´s missing in the discussion today about non-neuro physicians doing thrombectomies!

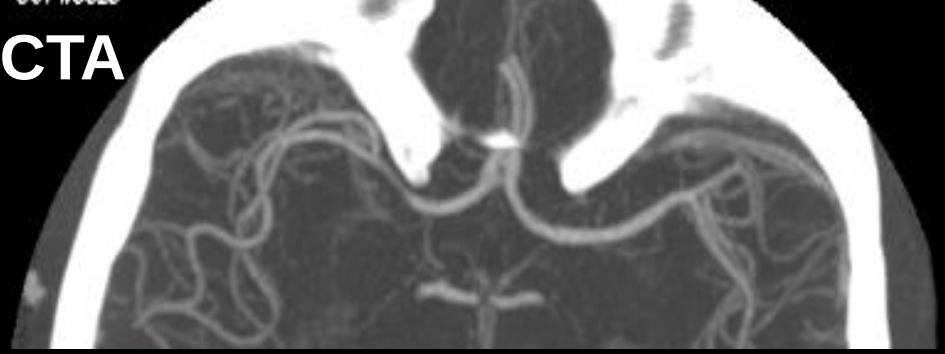
Knowledge matters!

- 37 yo male
- Previously healthy
- Sudden L hemiparesis when biking

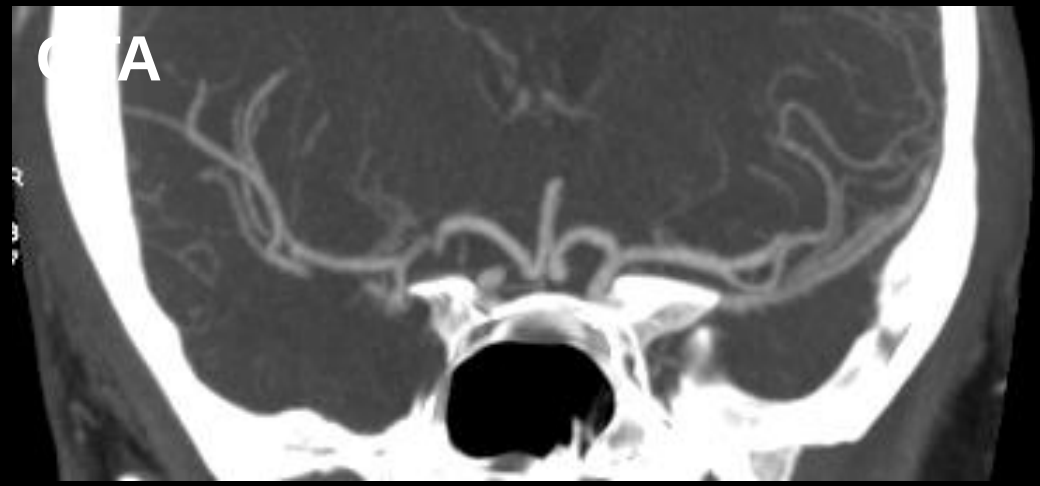
- NIHSS score 14
- L hemisymptoms
- Neglect

At admittance

CTA

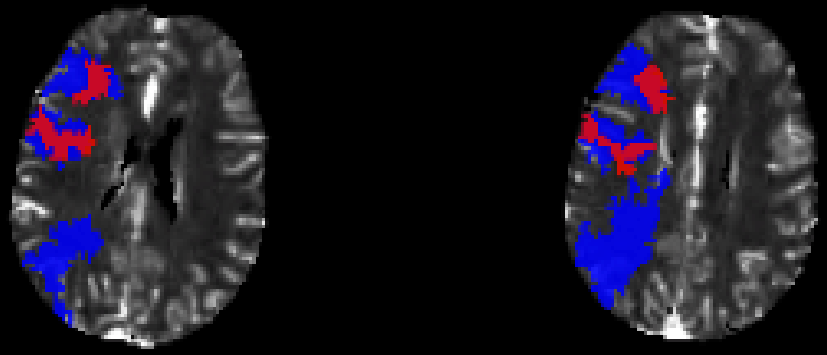


CTA



CT

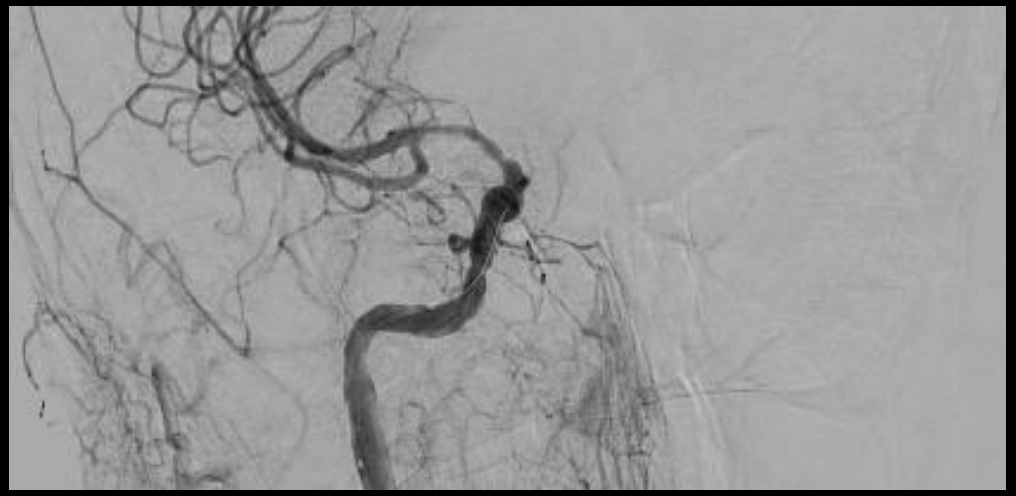
CTP OLEA



Treatment

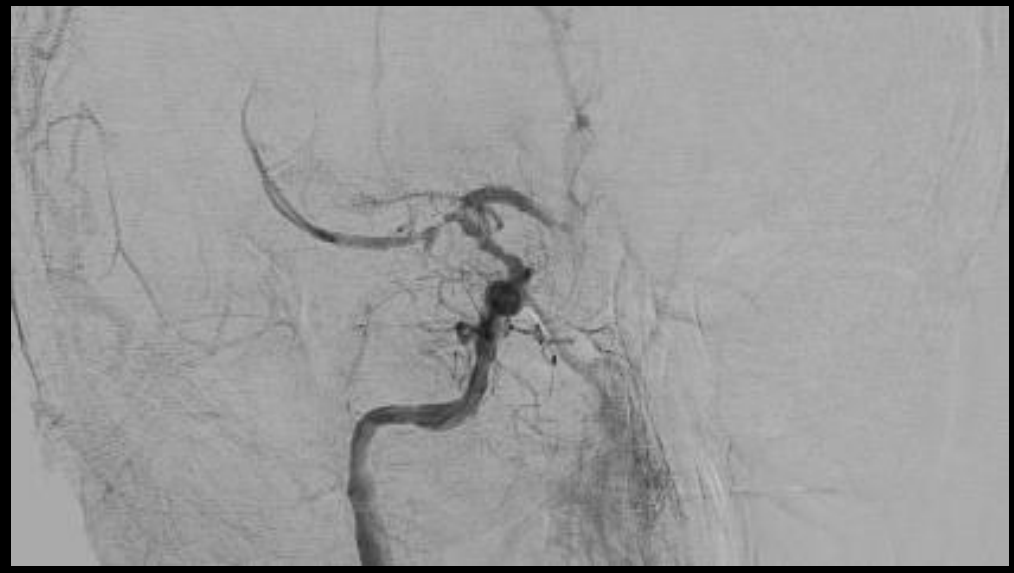
- M1 upper siphon occluded
- Good by-pass effect
- No yield from MT
- Slightly improved flow

Device in place



Initial run

After MT



Now what…?

- Try again?
- Change device?
- Change technique?

or,

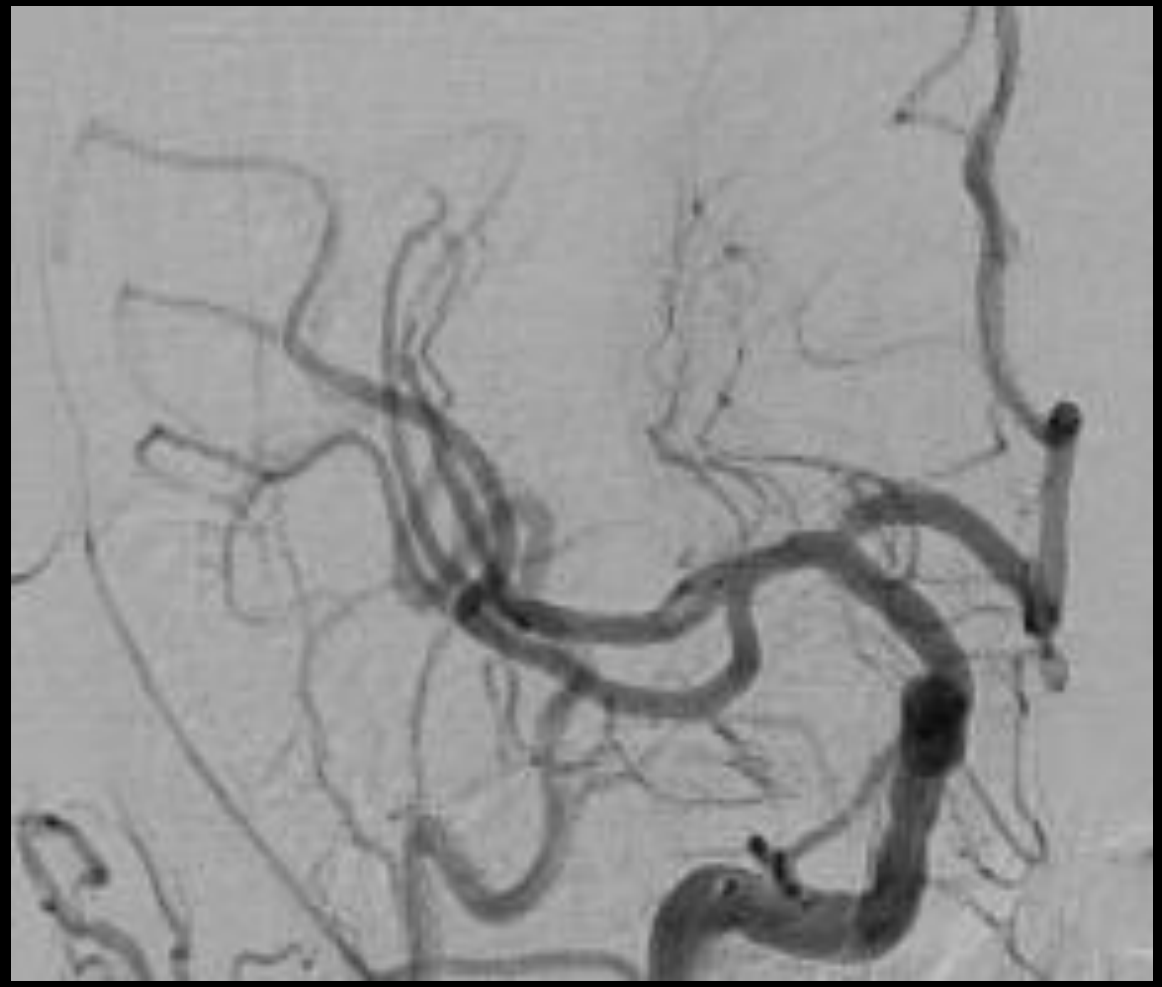
…use *your* *knowledge*, *experience* and *training*

Circumstantial evidence

- 37 yo
- No medical = cardiac history
- Fluctuating flow
- Good temporary by-pass effect
- No yield

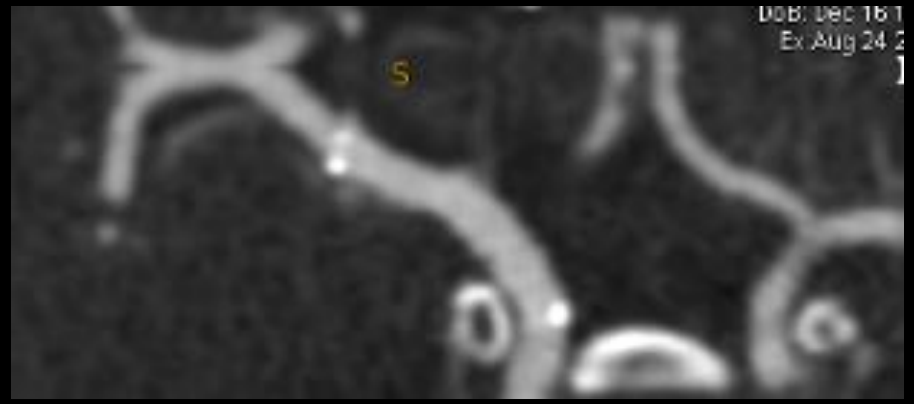
Intracranial dissection!

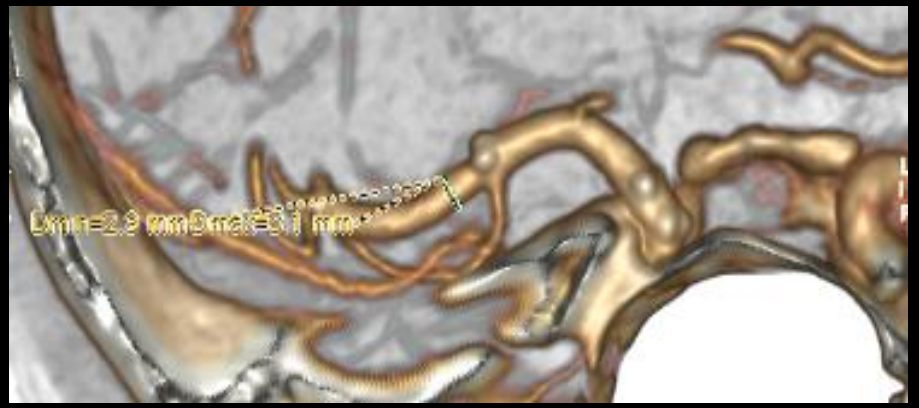
Final run after stenting

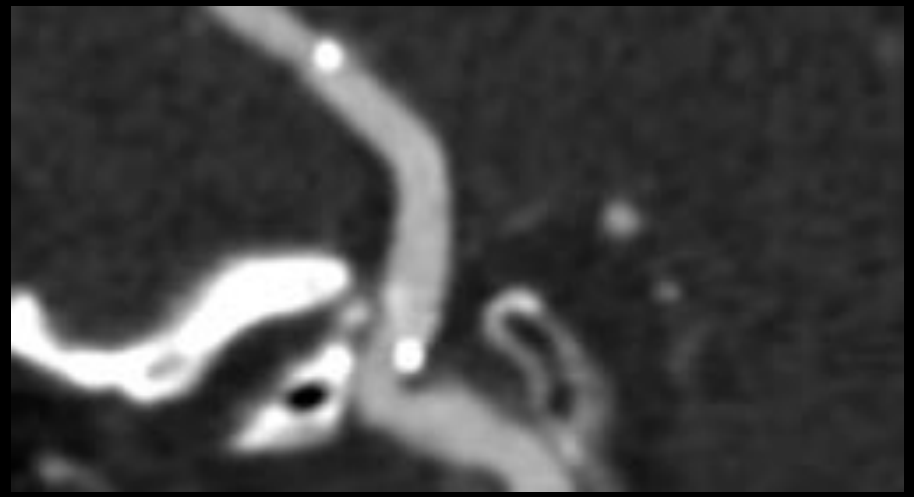


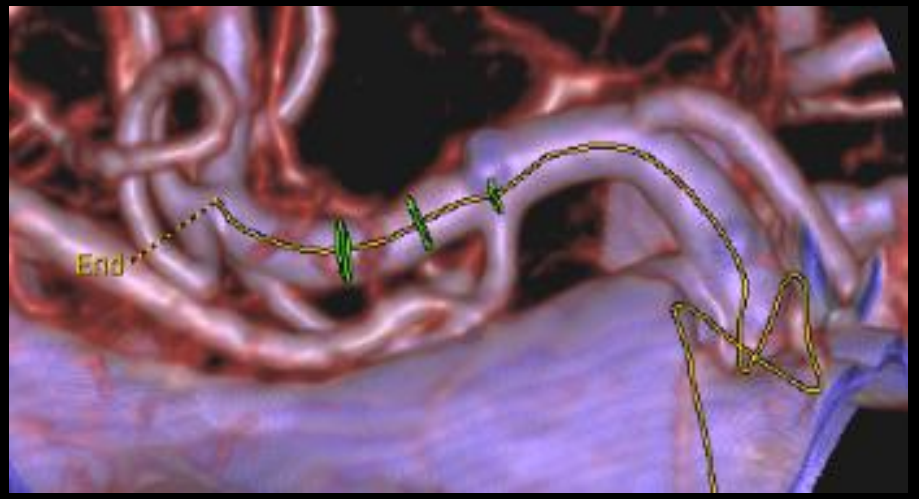
24 h CT

48 h CTA





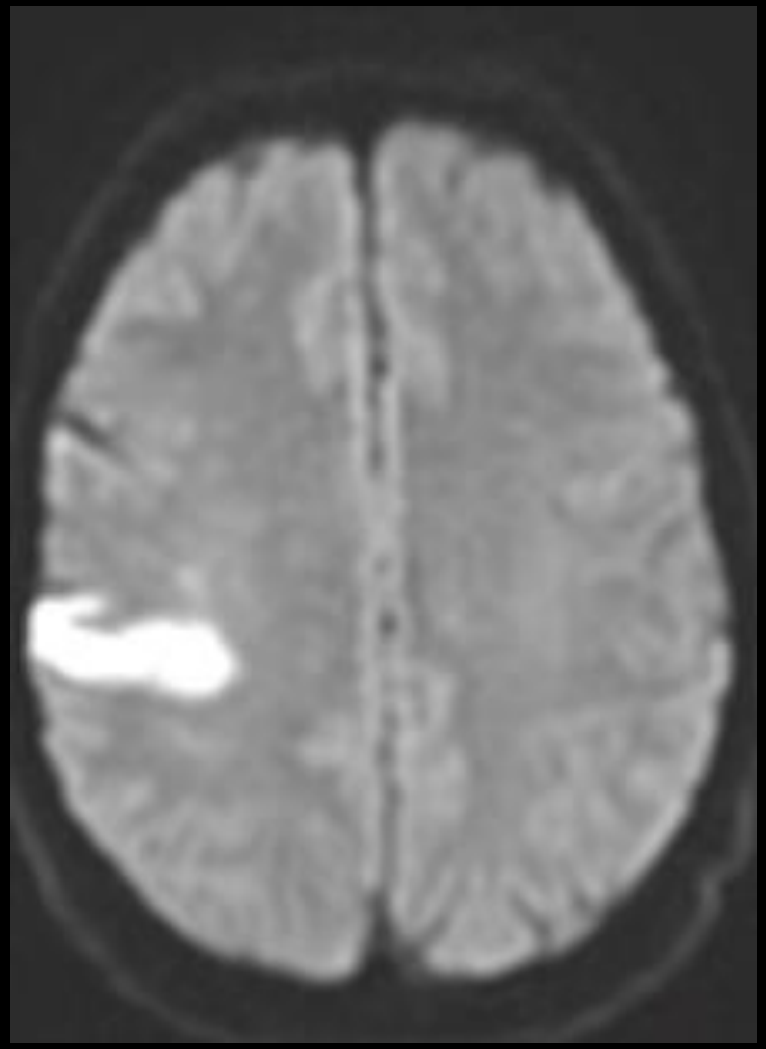




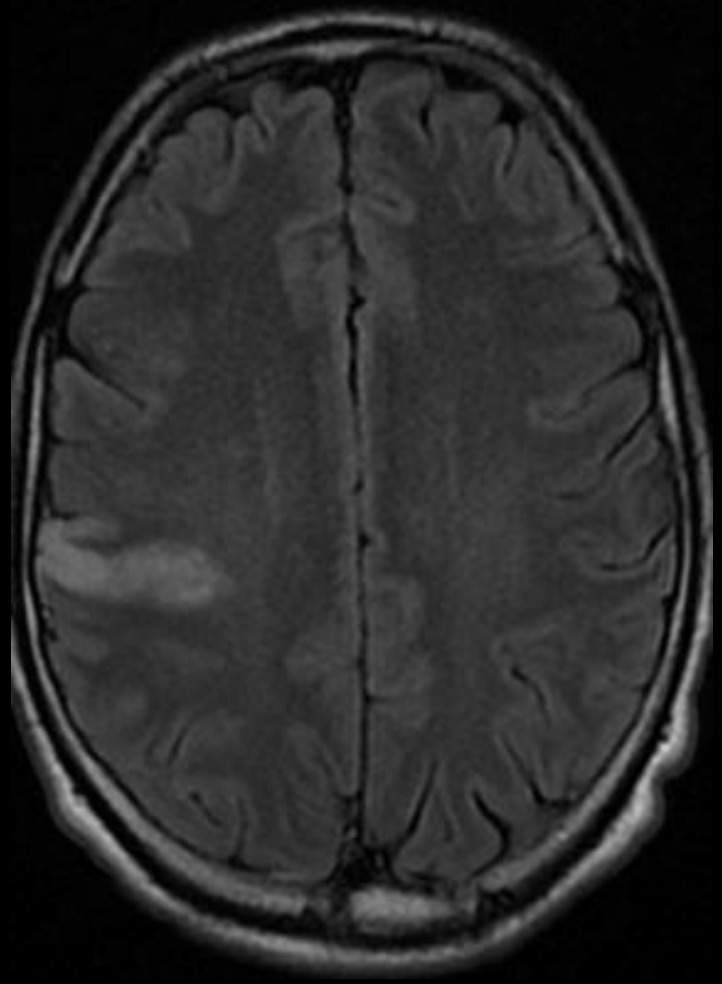
48 h MR

- **Home after 72h**
- **NIHSS = 1**

DWI



T2 FLAIR



Important!

…it requires *knowledge*, *training* and *experience* to perform mechanical thrombectomies effectively and safely

and,

…you need to *care* for the patients properly

Knowledge

- About the brain as an organ
- About the intracranial circulation
- About the specifics of intracranial arteries

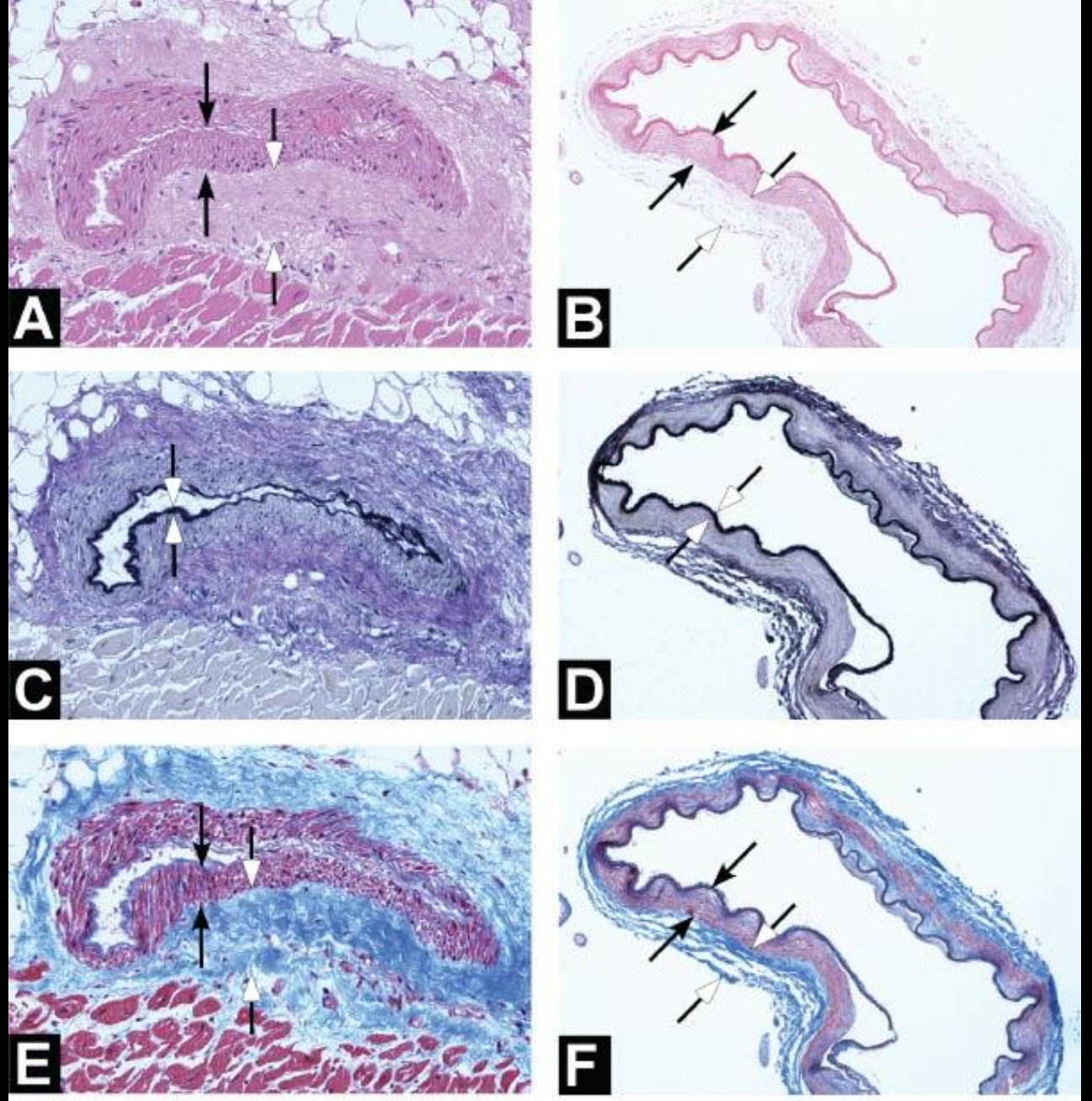
LAD

MCA

Muscularis
Adventitia

Internal
elastic

Collagen,
stained
blue



Meyers PM, et al. 2007.
Annu. Rev. Med. 58:107–22

And, it´s difficult to get the training and experience

- Acute patients – difficult to practice
  - Simulators?
  - Animal courses?
  - Need also to *do other neurointerventional procedures* and work in a group with experienced neurointerventionists

We should never...

...prohibit someone to help a patient with a thrombectomy...but...

...make sure that she/he has proper knowledge, training and experience...and that appropriate care for the patients is available