Comments On Acute Stroke Treatment From A Pioneer: Why Others Than Neurointerventionists Must Be Involved And How Can They Be Trained

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The case: R.O., born 1998

- 16 yrs old girl
- Lives in a small village close to Frankfurt with her parents and a dog named "Buzzi"
- Goes to high school, 10th grade
- Would like to study medicine - but she is not sure whether she can make it
- Tuesday, Aug 11, 2015 was her destiny day

R.O., born 1998

- In the evening of Aug 11, 2015 ....
- ... she suffered from sudden weakness of her right arm followed by complete hemiparesis
- Awake but could not speak
- Her mother with the help of neighbors managed to bring her to the ER of the Sankt Katharinen Hospital
R.O., born 1998

- Complete hemiplegic at the time of arrival
- Could not speak
- CT showed (still) normal findings
- CT angio: left MCA occluded
- Door to lysis time 22 min
- But no improvement
- Discussion with the mother about the options ….

Neuro called me at 10:09pm: "Big stroke, 16 yrs old! Can you help?"

"Please wait here - I will come to you later "

10:12pm  Arrival in the cath lab

- In this case it was a really difficult femoral puncture!
- First angio of left carotid
  - Carotid angiography is not much different from cannulating the subclavian artery for IMA angio!
  - MCA occluded

Exchange for an 8F Cello balloon tipped guide

Groin hematoma due to difficult puncture + lytics

Someone had to compress

Microcatheter REBAR-027
Coronary Whisper wire MS 0.014"

Like a very tortuous right coronary artery, vessels are very fragile – like an ulcerated plaque

"Please do not move your head, look straight ahead"
10:34pm
25min after the initial call
Whisper wire inside of a microcatheter in front of the MCA occlusion

Preparation of a 6x30 mm Solitaire

10:43pm
After deployment of the Solitaire

Tip of the microcatheter is in a distal branch
Deployment of 6x30 mm Solitaire
Like unsheathing a self-expanding stent

10:45pm
33 min after the initial call
"Ich kann wieder sprechen!!!!"
"I can speak again!!!!"

36 min after the initial call
• Please move your right hand!
• Yes, very good!
Aspiration with a big syringe and Solitaire retrieval
Deflation of the Cello balloon

Small clot – big event

Final angio

45 min after the initial call
Hands up again, straight up!
Now turn your hands upwards like this!
Close your eyes!

I can not do it because this hurts me!
That was very good!

R.O., born 1998
• Complete recovery!
• We do not know whether she will make it into medical school
• But if not, it will not be due to her stroke
• In any case, she will have an otherwise normal life

That's why Others Than Neurointerventionists Must Be Involved And How Can They Be Trained

Thank you!