Supplement

Survey questions

Q1. A 78-year-old woman from an assisted living facility (due to mild cognitive impairment (MoCA 20)) presents as a wake-up stroke, 9 hours from last seen well. CT ASPECTS is 9. CTA shows left M1 occlusion. How would you manage the patient?

Intravenous Thrombolysis (IVT) alone as wake up stroke
Direct to Endovascular Therapy (EVT)
Complete CTP or MRI prior to EVT
Complete CTP/MRI prior to combined IVT and EVT
Refer to EVT center to decide next course of action
Medical Management

Fact 1:
A recent study in JAMA Neurology (Nguyen et al., Nov 2021) of patients with large vessel occlusion in the anterior circulation, presenting in the late (6 to 24 hour) time window from symptom onset showed that patients who were selected for mechanical thrombectomy using head CT + CT angiography (CTA) (n=534) have similar outcomes compared to patients selected with advanced imaging (CT perfusion n=752, or MRI, n=318).

Q2: Would you agree to base reperfusion therapies for patients presenting in the late time window (6 to 24 hours) on CT+CTA as opposed to advanced brain imaging (CTP/MRI) done in DAWN/DEFUSE3 studies?
I agree with just CT/CTA modalities for patient selection in late time window.
I agree with CT/CTA/CTP for patient selection in the late time window.
I agree with MRI/MRP for patient selection in the late time window
Given the uncertainty about the best strategy, I make individual decisions

Fact 2:
The AHA/ASA and European Stroke Guidelines recommend advanced brain imaging for patient selection for revascularization therapies presenting with late time window.
Q3: When making treatment decisions under uncertainty, which option below are you most comfortable with?
Following your standard clinical practice based on your expertise and evidence
Following the recommendations from the current clinical guidelines
Following standard of care as established in my region or country
I do not apply a consistent strategy for every therapeutic decision (i.e. hybrid approach 50/50 practice-based and guideline-based)

Q4. Is advanced imaging (CTP/MRI) available 24/7 at your institution?
Yes, and we use it routinely
Yes, but it is not always immediately available
No, it is not available
No, it is only available on weekdays
Only available as a special request

Q5. Do you routinely use advanced imaging (CTP/MRI) at your center for
Thrombectomy decision making in patients presenting with LVO in the 6-24 hour time
window?
Yes, we use it in every case
No, we use it in some cases
Advanced imaging (CTP/MRI) is not available
Treatment decisions are based on CT/CTA at my institution

Q6. If you don't have advanced imaging readily available, and a patient presents to you
with LVO in the 6-24h window based on CT/CTA imaging, how do you treat this patient?
We refer to thrombectomy based on CT scan imaging
We refer to a center with advanced imaging
We treat this patient with medical management only
We wait for advanced imaging (i.e. technologist on call comes to my institution)
We enter the patient in a randomized trial

Q7. If you use advanced imaging (CTP/MRI) for selection of patients in the late window,
i.e. 6 to 24 hours, compared to CT imaging, what additional time does it usually take in
your center to obtain these images to decide a patient's candidacy for thrombectomy?
5 minutes
10 minutes
20 minutes
30 minutes
45 minutes
60 minutes
90 minutes
120 minutes

Q8. If you use advanced imaging (CTP/MRI) for selection of patients in the late window,
i.e. 6 to 24 hours, compared to CT imaging, what additional time delay do you believe is
acceptable to obtain these images to decide a patient's candidacy for thrombectomy?
0 minutes

5 minutes
10 minutes
20 minutes
30 minutes
45 minutes
60 minutes
90 minutes
120 minutes

Q9. The RESCUE-Japan LIMIT study showed benefit for endovascular therapy compared to medical management in the treatment of patients in Japan with large core infarct (ASPECTS 3 to 5), up to 24 h from symptom onset. Of note, most patients in this study (86%) were selected by MRI.

A 70-year-old patient presents 7 hours from symptom onset, NIHSS of 17. There is a left M1 occlusion, CT ASPECTS is 4. How would you next manage this patient?
Medical Management
CTP, then triage
MRI, then triage
Direct to angio for thrombectomy
I would randomize the patient into an ongoing large core infarct trial study

On a scale from 1 (no regret) to 100 (high regret), have you regretted NOT pursuing EVT for a patient with a LVO (i.e. M1 or M2 occlusion)?

On a scale from 1 (no regret) to 100 (high regret), have you regretted pursuing EVT for a non-ideal candidate that ended up having a poor outcome?