

Supplementary material. Forty questions used in this survey

1. What is your specialty subject?

Neurology Neurosurgery Radiology

2. How long have you performed neurological interventional procedures?

<5 5~10 10~15 15~20 >20

3. How many times does your hospital perform trans-femoral cerebral angiography annually (as of 2016)?

<100 100~300 300~600 600~1000 >1000

4. How many doctors are able to perform endovascular therapy (EVT) in your hospital?

1 2 ≥3

5. What are the specialty subjects of the medical staff who perform EVT in your hospital? You can choose multiple answers.

Neurology Neurosurgery Radiology

6. What is the minimum number of staff in the EVT Team when performing EVT outside working hours in your hospital?

3 4 5

7. Does your hospital have an EVT fellowship training program?

Yes No

8. What faculties participate in the EVT fellowship training program and how many years are spent in the training program?

Neurology Neurosurgery Radiology

9. Does your hospital have an inter-department consultation system, such as neurology, radiology, or neurosurgery?

Yes No

10. Please select all special treatment rooms in your hospital.

NCU Stroke Unit ICU None

11. Please select all imaging equipment in your hospital.

biplane DSA MRI CT (CTA available) DSA

12. How many mechanical thrombectomy (MT) are performed in your hospital?

<10 10~25 25~50 50~100 >100

13. Does your hospital perform MT of hyperacute ischemic stroke patients 24 hours/7 days?

Yes No

14. How many specialists are available to perform MT for hyperacute ischemic stroke patients in your hospital?

1 2 3 >3

15. Are the tests performed to determine the need for MT different according to the time elapsed from a stroke's onset when a patient suspected to have had a hyperacute ischemic stroke comes to your hospital?
Yes No
16. If the tests that are performed are different according to the time elapsed from the stroke's onset at your hospital, what is the reference time?
3 4.5 6 8
17. If the tests that are performed are different according to the time elapsed from stroke onset in your hospital, what imaging tests are performed to determine whether MT is needed? You may choose multiple answers.
NCCT CTA multiphase CTA Perfusion CT DWI MR PWI-DWI MRA
18. If the tests that are performed are the same regardless of the time elapsed from stroke onset in your hospital, what are the imaging tests performed to determine whether MT is needed? You may choose multiple answers.
NCCT CTA multiphase CTA Perfusion CT DWI MR PWI-DWI MRA
19. Does your hospital provide a perfusion map of perfusion CT outside of working hours (weekdays 8:00 am – 5:00 pm)?
Yes No
20. Are the tests performed to determine whether MT is needed in the case of a posterior circulation stroke the same as those used in the case of an anterior circulation stroke in your hospital?
Yes No
21. If the tests performed to determine whether MT is needed in the case of a posterior circulation stroke are different in the case of anterior circulation stroke in your hospital, what are the tests performed to determine whether MT is needed?
NCCT CTA multiphase CTA Perfusion CT DWI MR PWI-DWI MRA
22. Please select the cases when MT is not performed for hyperacute ischemic stroke patients in your hospital. You may choose multiple answers.
Low NIHSS/Old Age/Anatomical location/Low ASPECTS/No DWI-PWI mismatch/None
23. Is the MT performed when the following occlusion is present if the symptoms are light and clinically improved (NIHSS <4) in your hospital?
M2 Yes No A2 Yes No BA Yes No
24. How long does your hospital continue to treat anterior circulation strokes after symptom onset?
6 8 12 24
25. How long does your hospital continue to treat posterior circulation strokes after symptom onset?
6 8 12 24
26. Does your hospital do general anesthesia prior to the treatment of hyperacute ischemic stroke patients?
Yes Conscious sedation Occasionally Local anesthesia

27. Please select the appropriate treatments for hyperacute ischemic stroke patients in your hospital.
MT/우선 tPA 후 호전 확인 뒤 MT/ tPA 사용 후 바로 MT
28. What amount of tPA is administered to hyperacute ischemic stroke patients in your hospital?
full dose/reduced dose/none
29. What are the MT devices preferred by your hospital?
stentriever aspiration
30. Does your hospital limit the number of uses of stentriever? If so, how many times may they be used?
4 3 5 no limitation
31. Please select the first and second tools used in MT.
solitaire trevo penumbra ERIC Revive
32. What is the recanalization rate of TIC1 2b or 3 after MT in your hospital (as of 2016)?
>90% 80-90% 70-80% 60-70% <60%
33. What is the proportion of using a balloon-guiding catheter during MT procedures in your hospital?
>80% 60-80% 40-60% 20-40% none
34. What is the proportion of using an intermediate catheter during MT procedures in your hospital?
>80% 60-80% 40-60% 20-40% none
35. What is the proportion of using BGC and IC at the same time during MT procedures in your hospital?
10-20% 20-40% 40-60% 60-80% none
36. What is the recanalization order in the case of tandem occlusions in your hospital?
proximal부터 distal부터 가능한대로
37. What does your hospital do if blood flow is poor due to residual stenosis in the occluded vessel during MT?
angioplasty only/ angioplasty-stenting/ IA or IV tirofiban/ bypass surgery
38. With what frequency does your hospital use IA-UK or tirofiban during MT?
<10% 10-20% 20-30% 30-40%
39. What is follow up imaging modality used to assess the final size of cerebral infarction after MT in your hospital?
CT MRI CT and MRI None
40. When does the imaging inspection for final assessment of MT occur in your hospital?
MT 직후 /24-48시간뒤/1주 뒤/퇴원 직전