Survey

Uncertainty related to thrombolysis before mechanical thrombectomy

After publication of randomized-controlled trials evaluating direct endovascular thrombectomy versus alteplase + endovascular thrombectomy many unanswered questions remain. One important consideration is the uncertainty one would consider acceptable when deciding whether to skip or administer intravenous thrombolysis.

To gain more insights into treating physicians' decision-making, we designed this survey. We would greatly appreciate your contribution to the field and the future of stroke care around the globe. There will be no reimbursement for your participation and participating in the survey is voluntary. As a bonus, we are giving away two IPads among survey respondents.

| Sex              | Female | Male |
|------------------|--------|------|
| Training         | non-interventional Neurology / non-interventional Neuroradiology | interventional Neuroradiology / endovascular Neurosurgery / interventional Neurology |
| Geographic Location | Northern America | Southern America | Europe | Africa | Middle East | Asia | Australia |
| Country          | ____________________ |
| Current appointment level | Junior Faculty | Mid-Career | Senior Faculty |
| Annual mechanical thrombectomy volume of your center | < 100 | 100-200 | 200-300 |
| Percent of time devoted to the care of stroke patients | < 10% | 10-50% | 51-99% |
In an acute stroke trial, large vessel occlusion patients are randomized to an IV lytic drug followed by an endovascular intervention (standard of care) or the endovascular intervention alone (experimental arm). The endovascular intervention without the IV lytic drug yielded the same number of patients achieving functional independence (modified Rankin Score 0-2) at 90 days after stroke, but the degree of certainty of this result is limited by trial sample size. This uncertainty implies that, while it is most likely that skipping the drug has no effect on the outcome of patients, it is also possible that it improves or worsens the outcome to some degree. There are several pathophysiological arguments in favor and against using the IV lytic drug before the endovascular intervention (current standard of care). How much certainty would you deem sufficient to skip the IV lytic drug and treat patients with the endovascular intervention alone in clinical practice?

I would feel comfortable skipping the IV lytic drug if the best estimate is that endovascular intervention alone yields the same number of independent outcomes, there is also a possibility that skipping IV lysis increases the number of independent outcomes, and I can be highly confident that, in the worst possible scenario, no more than X out of 100 patients treated with endovascular intervention alone will fail to regain functional independence due to skipping the IV lytic drug.

Note: Please enter X as an integer number.

A visual depiction of some potential X values of the frequencies can be found below:
### Additional questions

| Question                                                                 | Yes | No |
|-------------------------------------------------------------------------|-----|----|
| Have you participated as an investigator in any of the following randomized-controlled trials? |     |    |
| • NINDS Part 1                                                          |     |    |
| • NINDS Part 2                                                          |     |    |
| • ECASS I                                                               |     |    |
| • ECASS II                                                              |     |    |
| • ATLANTIS A                                                            |     |    |
| • ATLANTIS B                                                            |     |    |
| • ECASS III                                                             |     |    |
| • EPITHET                                                              |     |    |
| • IST-3                                                                 |     |    |
| • TEMPSI                                                                |     |    |
| Have you participated as an investigator in any of the following randomized-controlled trials? |     |    |
| • MR CLEAN                                                              |     |    |
| • ESCAPE                                                                |     |    |
| • REVASCAT                                                              |     |    |
| • SWIFT PRIME                                                           |     |    |
| • EXTEND-IA                                                             |     |    |
| • PISTE                                                                 |     |    |
| • MR THRACE                                                             |     |    |
| • RESILIENT                                                             |     |    |
| Have you participated as an investigator in any of the following randomized-controlled trials? |     |    |
| • MR CLEAN NO IV                                                       |     |    |
| • DIRECT MT                                                             |     |    |
| • DIRECT SAFE                                                           |     |    |
| • DEVT                                                                   |     |    |
| • SWIFT DIRECT                                                          |     |    |
| • SKIP                                                                  |     |    |

| Question                                                                 | Yes | No |
|-------------------------------------------------------------------------|-----|----|
| In patients undergoing mechanical thrombectomy, do you stop intravenous alteplase before the full dose is administered? |     |    |
| • No, unless if there are clear medical reasons (e.g. angiographic signs of bleeding) |     |    |
| • Yes, as a standard procedure when arterial puncture occurs           |     |    |
| • Yes, as a standard procedure at first device deployment              |     |    |
| • Yes, as a standard procedure after successful reperfusion is reached |     |    |
| • Yes, on an individual case basis after successful reperfusion is reached |     |    |
| • Other, please specify                                                 |     |    |

Please define: ________________________________________________