Can We Agree on a Standard Terminology for Catheter-Based Interventions for Acute Ischemic Stroke?

To the Editor:

Several terms have been used for catheter-based interventions in acute ischemic stroke, as exemplified in 4 articles in the December issue of Stroke.1–4 A search in PubMed on December 6, 2013, using the terms from these articles in combination with the word “stroke,” gave the following results: endovascular treatment (813 hits), thrombectomy (701), endovascular therapy (380), endovascular intervention (104), intra-arterial therapy (93), intra-arterial treatment (34), endovascular clot removal (19), and neurothrombectomy (12).

Catheter-based interventions for stroke encompass several different techniques, from use of manipulation of the guide-wire inside the thrombus to use of one or several mechanical devices: Thrombectomy devices are used to retrieve a thrombus. Thrombus disruption devices use a guidewire or snare to fragment a thrombus. Thrombo-aspiration devices use a catheter to aspirate the thrombus. Stent devices are expandable scaffolds that entrap the thrombus between the stent and the blood vessel wall. Sonothrombolysis devices use ultrasonic vibrations to dissolve the thrombus. These techniques are often combined with intra-arterial injection of thrombolytic drugs.

Often, these techniques are used in combination, and some terms are too specific to capture the variety of techniques that are used during a single intervention (eg, "thrombectomy"). Other terms are general ("endovascular," "intra-arterial"). I think that the term used for these interventions should convey information about the mode of access to the cerebral vasculature, which is common to all of them. Cardiologists use the term “percutaneous coronary intervention (PCI)” to describe the percutaneous access of all coronary interventions. Similarly, for cerebrovascular interventions, I propose the term “percutaneous cerebrovascular intervention (PCVI)” or the more general term “percutaneous vascular intervention (PVI).” I find this term to be accurate, informative, and in congruence with the terminology in other fields of medicine, and I believe that a standard, uniform term for catheter-based interventions for acute ischemic stroke would facilitate communication and collaboration among clinicians and researchers in this expanding area of stroke medicine.

Disclosures

None.

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