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Acute Ischemic Stroke and New Anticoagulants – How to Act in the Acute Phase of Stroke?

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The comment of Dr. Zhou and colleagues was very pertinent and may lead to an important discussion regarding this clinical scenario. How should neurologists act in these cases? [1].

The cardioembolic stroke (the ‘red thrombi’) is a stroke subtype with great rates of reperfusion, however, with an increased number of hemorrhagic complications (some of them due to treatment) [2–4].

In the RE-LY trial, dabigatran proved to be superior to warfarin, presenting fewer cases of systemic embolism and intracranial hemorrhage in patients with nonvalvular atrial fibrillation. During this trial, 183 patients using dabigatran 110 mg twice a day among 6,015 participants and 134 patients using dabigatran 150 mg twice a day among 6,076 participants had systemic embolism [5].

In this case, we described a 73-year-old patient on dabigatran therapy with an acute stroke, who was treated with recombinant tissue plasminogen activator with a good outcome. The results of the coagulation tests were normal (ecarin clotting time was not performed), which might be the reason for a good response to the treatment. If we had had the information about the use of dabigatran before we started systemic thrombolysis, the coagulation tests and time of onset of the symptoms would have guided our decision. We suggested systemic thrombolysis because in our hospital it is the fastest treatment for reperfusion. However, intra-arterial thrombolysis with recombinant tissue plasminogen activator or mechanical reperfusion (e.g. MERCI or Solitaire) can also be good choices to treat these patients [6].

There are few examples in the literature that helped us take a decision in this case. In an experimental study, Pfeilschifter et al. [7] showed that the combination of recombinant tissue plasminogen activator and dabigatran did not increase the risk of hemorrhagic events.

We thank Dr. Zhou and colleagues for their interesting comments and contribution to the important field of new anticoagulants. In summary, we think that the use of endovenous recombinant tissue plasminogen activator in patients on dabigatran anticoagulation seems to be safe. However, the development of a protocol for these cases is important to guide the neurologists in the emergency department.

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