Letter by Fuentes and Díez-Tejedor Regarding Article, “Anticoagulants for Cerebral Venous Thrombosis: Harmful to Patients?”

To the Editor:

We have read with interest the recently published article by Cundiff in the section Comments and Opinions of Stroke that raised an important question: do we really have enough evidence to support the safety of anticoagulants for cerebral venous thrombosis (CVT)?

Current guidelines recommend initial anticoagulation with adjusted-dose intravenous unfractionated heparin or weight-based low molecular weight heparin in full anticoagulant doses, followed by vitamin K antagonists, regardless of the presence of intracranial hemorrhage (ICH), with a level of evidence B.1 However, this recommendation mainly lays on the results of a Cochrane review1 that include data from 2 small randomized trials involving a total of 79 patients. One of them could not demonstrate a statistically significant effect of subcutaneous nadroprin and the other, evaluating the efficacy of adjusted-dose intravenous heparin, was prematurely stopped after recruiting only 20 patients, thus without achieving the calculated sample size. Thus, we are facing 2 small-size clinical trials, with methodological limitations or negative results, and a systematic review concluding that anticoagulant therapy was associated with a potentially important reduction in the risk of death or dependence, but acknowledging the lack of statistical significance.1

However, in our opinion, the most striking issue, is the recommendation of anticoagulation regardless of the presence of ICH.2 Whether the efficacy of anticoagulation is controversial, its safety is even more questionable in those patients with ICH because of CVT. We should take into account that it is possible that patients with early ICH in the first brain imaging study were not included in the previously mentioned clinical trials, and therefore, the results on safety of anticoagulants cannot be extrapolated to all patients with CVT and ICH.2 In fact, as this review shows, those patients with ICH on the admission neuroimaging are less likely to be treated with intravenous heparin in clinical practice. In addition, there are case reports showing the impairment of anticoagulation had bleeding complications data reported, and that a new ICH or an increased volume of ICH occurred in up to 2.6% of patients with data available. In fact, the Cochrane meta-analysis acknowledged that a 0% of symptomatic bleeding in 40 patients treated with heparin was associated with a 95% confidence level of 0% to 9%, so that an impact of up to 9% of new ICH cannot be ruled out.3

In conclusion, the risk of harm from anticoagulants in CVT should be taken into account, especially in patients with cerebral hemorrhage at admission. Thus, as it has been pointed out in the accompanying editorial by Selim, “the existing evidence-based guidelines for management of CVT would benefit from more evidence”,5 but in the meantime, guidelines should acknowledge the limitations in the safety data in this group of CVT patients and avoid including the statement “regardless the presence of ICH” when advising the treatment with full-dose anticoagulation. In our opinion, in patients with CVT and cerebral hemorrhage at admission, the therapeutic decision must be individualized, and the rebleeding risk should be weighed.

Disclosures

None.

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Stroke. 2014;45:e91; originally published online March 20, 2014;
doi: 10.1161/STROKEAHA.114.005222
Stroke is published by the American Heart Association, 7272 Greenville Avenue, Dallas, TX 75231
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Print ISSN: 0039-2499. Online ISSN: 1524-4628

The online version of this article, along with updated information and services, is located on the World Wide Web at:
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