Idarucizumab: A novel antidote for reversal of dabigatran

Sir,

We read with great interest a recent article by Dwyer et al. about dabigatran that was published in the April 2015 issue of the Asian Journal of Neurosurgery. In this article, authors provided a brief, but comprehensive review of the clinical efficacy and safety of dabigatran. Dwyer et al. wrote that “there is no specific reversal agent for dabigatran” and proposed an algorithm of dabigatran reversal based on the replacement of deficient coagulation factors and rapid renal dialysis. However, in our opinion, this connotation is now obsolete – A novel drug has been reported to have excellent efficacy and safety for rapid reversal of dabigatran.

Idarucizumab is a monoclonal antibody directed against dabigatran and binds to it 350 times more avidly than thrombin. In preliminary findings from the RE-VERSE AD trial (which were published in the New England Journal of Medicine on June 22, 2015), Pollack et al. demonstrated the safety and efficacy of idarucizumab for reversal of dabigatran in 90 patients. In all these patients, anticoagulant effects of dabigatran were reversed with remarkable efficacy (88–90%) and safety. The RE-VERSE AD trial is still on-going and aims to recruit 300 patients in nearly 400 hospitals located in 38 different countries of the world. In another Phase I trial published online in the Lancet on June 15, 2015, Glund et al. reported the safety and efficacy of idarucizumab in 47 healthy volunteers. No serious adverse effects of idarucizumab were reported in any of these healthy subjects. In view of these reported findings, idarucizumab is a novel and promising drug for reversal of dabigatran. While, we do acknowledge that these trials were only recently reported and that idarucizumab is not widely available at the moment, it is still important for all the scientists in general and neurosurgeons in particular, to keep abreast with the latest developments in the field of medicine. It seems very likely that in the near future, idarucizumab would become the first-line antidote for reversal of dabigatran.