

Idarucizumab for dabigatran reversal for intravenous thrombolysis of acute ischemic stroke

Authors: Cecilia Vidal, Daniel Bezerra, Valério S. Carvalho Junior, Aquiles Mamfrim, Miguel Picanço, Saulo Ribeiro, Paula Roberta S. Accioli Vasconcelos, Flavia Abido, Cristiane Patroclo, Henrique Cal

CASE REPORT

We report a case of a patient using dabigatran who was submitted to IV thrombolysis and thrombectomy due to an acute ischemic stroke not followed by bleeding complications. Eighty-seven year old male patient was taking dabigatran 150mg bid for at least seven years due to known atrial fibrillation. He presented to the emergency room aphasic, hemiplegic on the right, negligent and with tactile hyposthesia totalizing a NIHSS (National Institute of Health Stroke Scale) of 22 points. Symptoms were detected 90 minutes prior to medical evaluation. Initial head computed tomography did not show any bleedings and had an ASPECTS (Alberta Stroke Program Early CT Score) of 10 points with no detectable hypodensities. Head and neck angiogram revealed an internal carotid and a M1 middle cerebral artery occlusion. Considering the high NIHSS score we obtained family consent and decided to administer idarucizumab (Praxbind) 5g (2,5g with a less than 15 minute interval) immediately followed by intravenous thrombolysis (IVT) with rtPA within two hours of symptom onset. After three hours of last asymptomatic moment, patient was submitted to a successful mechanical thrombectomy. Control head CT did not show any bleeding. Unfortunately, patient did not recover the neurological deficits.

DISCUSSION

Intravenous thrombolysis is contraindicated in patients using oral anticoagulants. Recently the specific monoclonal antibody idarucizumab, which immediately reverses the anticoagulation effect of dabigatran, was introduced in the market. Its main role is to reverse anticoagulant effect in patients with severe bleeding. However, new guidelines recommend IVT a few minutes after administration of idarucizumab in patients taking dabigatran, especially in those cases where mechanical thrombectomy is not available or will take too much time. In our case, the medication was effective and patient had no bleeding after IVT or mechanical thrombectomy. Probably due to its high cost and limited availability, there have not been any publication of case reports of its use prior to IVT in acute ischemic stroke treatment in Brazil.

CONCLUSION

Administration of idarucizumab prior to IVT has proved safe in many case reports. Guidelines should include its use in all acute ischemic strokes in patients taking dabigatran.