



DEBATE

# Cerebral Venous Thrombosis—go for early EVT: Pros

Diana Aguiar de Sousa<sup>1</sup>

From the Lisbon Stroke Summit, Lisbon, Portugal. 6–7 April 2018.

## Abstract

Thrombosis of the cerebral veins and sinuses (CVT) is a distinct cerebrovascular disorder in which the outflow of blood from the brain is blocked, causing increased venular and capillary pressure that leads to parenchymal brain lesions in approximately half of the cases. Despite standard medical treatment with anticoagulation, death or dependence occurs in about 14% of patients. In severe cases requiring transfer to an intensive care unit the mortality rate is up to 30%. In such cases, death is most often due to extensive cerebral edema or hemorrhagic stroke.

Although the role of recanalization of the occluded dural sinuses or veins in the outcome of patients with CVT is not well established, evidence from animal models suggests that early venous recanalization has an impact on brain tissue damage and an association between venous recanalization and favorable outcome is seen in patient cohorts.

Based on the hypothesis that rapid recanalization of the venous sinuses is key to improve the prognosis in severe

CVT, endovascular treatment (EVT) has been successfully used in multiple case reports and small series. More recently, the neutral results of the first randomized comparison of adjunctive EVT versus standard treatment with anticoagulation have increased uncertainty on the effectiveness of this intervention in patients with severe CVT. TO-ACT was a pragmatic trial designed to show the real-world effect of this intervention in a relatively broad patient group. Importantly, decisions regarding the protocol for EVT were left to the treating interventionalists and patients having a single predictor of poor outcome could be included.

The neutral results of this trial should pave the way for development of new local protocols and trials on EVT in patients with CVT. Further research on the pathophysiology of brain lesions, prognostic markers and EVT techniques should improve patient selection and standardization of EVT procedures in CVT.

<sup>1</sup>Department of Neurology, Hospital de Santa Maria, University of Lisbon, Portugal

Email address: [dianasousa@campus.ul.pt](mailto:dianasousa@campus.ul.pt)

Citation: Sousa, DA. Cerebral Venous Thrombosis—go for early EVT: Pros. International Journal of Clinical Neurosciences and Mental Health 2018; 5(Suppl. 1):D1

Published: 06 April 2018



Open Access Publication Available at <http://ijcnmh.arc-publishing.org>

© 2018 Sousa, DA. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

