



DEBATE

# Should EVT for LVO be offered to children?

Maja Steinlin<sup>1</sup>

From the Lisbon Stroke Summit, Lisbon, Portugal. 5–6 April 2019.

## Abstract

There are many reasons, why EVT should not be offered to children with LVO. The first and most prominent: Good effect of EVT is proven in adult but not in children. The only paediatric study on recanalization, the TIPS study, had to close due to failing in recruitment. Of the 95 children screened, non fulfilled the inclusion criteria. 54% had a mimic of stroke. Mimics in paediatric stroke are a big problem: in acute focal deficit, only 7% of children (adults 74%) suffer stroke! 23% of children screened had contraindications, mostly due to underlying aetiology. Childhood stroke is a multiple risk problem – many of them a contraindication for EVT. More than 50% of children with stroke have an underlying arteriopathy – but many of them due to an inflammatory process, thus being at high risk for EVT. One third have a cardiac origin. However, delay of diagnosis in this group might put them out of the treatment window. In general, the problem of de-

layed diagnosis did improve over the last two decades but is a persistent concern. Knowledge on EVT in children is scarce: Lately, two series of children after recanalization treatments have been published. In the French series 11/13 children had iv thrombolysis. The Swiss cohort included 11/16 after interventional recanalization. Both study show feasibility without significant risk. The Swiss study did show no better outcome in children treated by recanalization, the only predictor for outcome was pedNIH at diagnosis. Finally yet importantly, intracranial vessels of children are still small: carotid and medial cerebral arteries reach adult size at 6 and 5 years respectively – thus a technical challenge! In summary, missing indication (mimics), increased or unknown risk (different risk profile), missing technical experience in preschool children and the complete lack of data supporting EVT should restrain us from offering this aggressive treatment.

<sup>1</sup>Neuropediatrics, University children's Hospital Inselspital, Bern, Switzerland

Citation: Steinlin, M. Should EVT for LVO be offered to children?. International Journal of Clinical Neurosciences and Mental Health 2019; 6(Suppl. 1):D3

Published: 04 April 2019



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

© 2019 Steinlin, M. 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.

