Response to Letter by Bhatt

Response:

We thank Dr Bhatt for his interesting comment. We agree that rapid diagnosis enabling thrombolytic treatment of basilar artery occlusion (BAO) is particularly challenging in very young children. This is in line with the fact that no child with BAO younger than 6 years of age has been reported to be treated with thrombolysis except for the case of Bhatt et al.

The increasing awareness of pediatric stroke and the more frequent use of modern imaging techniques such as perfusion CT, perfusion and diffusion-weighted MRI, CT angiography, and MR angiography have the potential to improve the early differentiation between BAO and stroke mimics such as seizures and to reduce the time from symptom onset to treatment.

The natural history of BAO in children is not well-known because the available data are limited. Early recanalization after thrombolysis was regarded by Mattle and Linsberg to be the conditio sine qua non for good outcome (defined by a modified Rankin Scale score of 0 to 2) in adults with BAO.1 Furthermore, Rha and Saver showed in a systematic analysis that recanalization significantly improved the likelihood of a good clinical outcome and reduced mortality in adult stroke.2 It seems thus likely that early thrombolytic treatment will also improve the clinical outcome in childhood stroke due to BAO.

Considering the small number in single institutions and the wide range of age of children with stroke, multicenter research including large prospective registries and randomized controlled trials are needed to improve our limited knowledge in the challenging field of childhood stroke.

Disclosures

None.

Andreas Baumann, MD
Krassen Nedeltchev, MD
Department of Neurology
University Hospital of Bern
Bern, Switzerland

Luca Remonda, MD
Department of Neuroradiology
University Hospital of Bern
Bern, Switzerland

Sonya Jourdan Moser, MD
Department of Pediatry
University Hospital of Bern
Bern, Switzerland

Marie-Luise Mono, MD
Department of Neurology
University Hospital of Bern
Bern, Switzerland

Ralf W. Baumgartner, MD
Department of Neurology
University Hospital of Zurich
Zurich, Switzerland


Response to Letter by Bhatt
Marcel Arnold, Maja Steinlin, Andreas Baumann, Krassen Nedeltchev, Luca Remonda, Sonya Jourdan Moser, Marie-Luise Mono, Gerhard Schroth, Heinrich P. Mattle and Ralf W. Baumgartner

*Stroke*. 2009;40:e597; originally published online August 20, 2009;
doi: 10.1161/STROKEAHA.109.548776

*Stroke* is published by the American Heart Association, 7272 Greenville Avenue, Dallas, TX 75231
Copyright © 2009 American Heart Association, Inc. All rights reserved.
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:
http://stroke.ahajournals.org/content/40/10/e597

Permissions: Requests for permissions to reproduce figures, tables, or portions of articles originally published in *Stroke* can be obtained via RightsLink, a service of the Copyright Clearance Center, not the Editorial Office. Once the online version of the published article for which permission is being requested is located, click Request Permissions in the middle column of the Web page under Services. Further information about this process is available in the Permissions and Rights Question and Answer document.

Reprints: Information about reprints can be found online at:
http://www.lww.com/reprints

Subscriptions: Information about subscribing to *Stroke* is online at:
http://stroke.ahajournals.org//subscriptions/