

Tranexamic acid to improve functional status in adults with spontaneous intracerebral haemorrhage: the TICH-2 RCT

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Declared competing interests of authors: Rustam Al-Shahi Salman is a member of the Efficacy and Mechanism Evaluation Funding Board panel. Lelia Duley reports grants from the Nottingham Clinical Trials Unit during the conduct of the study. Christian Ovesen reports grants from the Velux Foundation (Søborg, Denmark), the Hojmosegaard Grant/Danish Medical Association (Copenhagen, Denmark), the Axel Muusfeldt's Foundation (Albertslund, Denmark), the University of Copenhagen (Copenhagen Denmark) and non-financial support from Merck Sharp & Dohme (MSD; Kenilworth, NJ, USA) outside the submitted work. Robert A Dineen reports grants from the National Institute for Health Research (NIHR) Health Technology Assessment (HTA) programme (project number 11/129/109) during the conduct of the study. Timothy J England reports grants from the NIHR HTA programme during the conduct of the study. Thompson G Robinson reports grants from the University of Leicester. Christine Roffe has been a member of the HTA General Board since 2017. David Werring reports personal fees from Bayer AG (Leverkusen, Germany) outside the submitted work. Philip M Bath reports grants from the British Heart Foundation and the NIHR HTA programme during the conduct of the study, others from Platelet Solutions Ltd (Nottingham, UK) and personal fees from Diamedica (UK) Ltd (Bratton Fleming, UK), Nestlé SA (Vevey, Switzerland), Phagenesis Ltd (Manchester, UK), ReNeuron Group plc (Bridgend, UK), Athersys Inc. (Cleveland, OH, USA) and Covidien (Dublin, Ireland) outside the submitted work.

Published July 2019

DOI: 10.3310/hta23350

Plain English summary

The TICH-2 RCT

Health Technology Assessment 2019; Vol. 23: No. 35

DOI: 10.3310/hta23350

NIHR Journals Library www.journalslibrary.nihr.ac.uk

Plain English summary

Background

Stroke caused by bleeding in the brain [i.e. an intracerebral haemorrhage (ICH)] is a medical emergency. Around one-third of such strokes are complicated by continuing bleeding, which usually occurs within the first few hours after trauma and childbirth, and is associated with death or severe disability. Tranexamic acid is a drug that is seen to reduce death from bleeding after trauma and childbirth.

Methods

The study enrolled adults within 8 hours of an ICH into this large randomised trial. Half of the participants were given an injection of tranexamic acid and the other half placebo (in the form of salt water). The main aim of the trial was to measure changes in recovery by a telephone questionnaire on how much the person was able to do or needed help with 90 days after the stroke (i.e. functional status). Other measures included amount of brain bleeding, complications after stroke (serious adverse events), drug side effects and death within 7 days of stroke.

Results

A total of 2325 participants from 124 hospitals in 12 countries were enrolled between 2013 and 2017.

Participants treated with tranexamic acid had no significant difference in functional status 90 days after stroke. There were small but significant reductions in brain bleeding, death in the first 7 days and complications after stroke, and tranexamic acid was safe with no increased side effects.

Conclusion

Treatment with tranexamic acid did not result in a significant improvement in recovery at 90 days (i.e. functional status), despite small reductions in the number of early deaths, amount of brain bleeding and the number of complications. Larger trials are needed to confirm if these small benefits observed after treatment with tranexamic acid can significantly improve functional status after stroke due to bleeding in the brain (ICH).

ISSN 1366-5278 (Print)

ISSN 2046-4924 (Online)

Impact factor: 3.819

Health Technology Assessment is indexed in MEDLINE, CINAHL, EMBASE, The Cochrane Library and the Clarivate Analytics Science Citation Index.

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This report

The research reported in this issue of the journal was funded by the HTA programme as project number 11/129/109. The contractual start date was in March 2013. The draft report began editorial review in September 2018 and was accepted for publication in March 2019. The authors have been wholly responsible for all data collection, analysis and interpretation, and for writing up their work. The HTA editors and publisher have tried to ensure the accuracy of the authors' report and would like to thank the reviewers for their constructive comments on the draft document. However, they do not accept liability for damages or losses arising from material published in this report.

This report presents independent research funded by the National Institute for Health Research (NIHR). The views and opinions expressed by authors in this publication are those of the authors and do not necessarily reflect those of the NHS, the NIHR, NETSCC, the HTA programme or the Department of Health and Social Care. If there are verbatim quotations included in this publication the views and opinions expressed by the interviewees are those of the interviewees and do not necessarily reflect those of the authors, those of the NHS, the NIHR, NETSCC, the HTA programme or the Department of Health and Social Care.

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