

Vertebral artery stenting to prevent recurrent stroke in symptomatic vertebral artery stenosis: the VIST RCT

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Declared competing interests of authors: Hugh S Markus is supported by a National Institute for Health Research (NIHR) Senior Investigator award and his work is supported by the Cambridge University Hospitals Trust NIHR Comprehensive Biomedical Research Centre. He reports personal fees from AstraZeneca plc (Cambridge, UK) for teaching outside the submitted work. Peter M Rothwell is supported by Wellcome Trust and NIHR Senior Investigator awards and his work is supported by the NIHR Biomedical Research Centre, Oxford, UK. He reports personal fees from Bayer AG (Leverkusen, Germany) outside the submitted work.

Published August 2019

DOI: 10.3310/hta23410

Plain English summary

The VIST RCT

Health Technology Assessment 2019; Vol. 23: No. 41

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Plain English summary

About one-quarter of all strokes occur in the back of the brain, which is supplied by the vertebral and basilar arteries. An important cause of stroke is a narrowing, or stenosis, of these arteries. It is known that patients who have a minor stroke due to narrowing of a vertebral artery (VA) have a high risk of a further stroke: as much as 30% in the next year. Stenosis of the VA can be treated with stenting, in which a wire mesh is put into the narrowed artery and opens it up. Many operations to insert a vertebral stent have been carried out worldwide with good technical results; however, it is not known whether it is better to treat vertebral stenosis with stenting or only tablets. The Vertebral artery Ischaemia Stenting Trial was a randomised controlled trial comparing vertebral stenting and best medical treatment (BMT) with BMT alone in patients who had suffered a minor stroke due to vertebral stenosis. Ninety-one patients had stenting and 88 had BMT alone. Patients were followed for an average of 3.5 years. It was planned to enrol 540 patients to the trial, but recruitment was slower than expected and funding for the study was halted; therefore, recruitment was stopped at 181 patients. There was no difference in the rate of recurrent stroke between patients who had stenting and those who had BMT alone. There was some evidence that stenting might be associated with a reduced risk of recurrent stroke, but the difference was not significant. The trial was limited by the failure to recruit the anticipated sample size. The results tell us that stenting is a possible treatment for vertebral stenosis; however, further trials are required to determine whether or not it is more effective at preventing recurrent stroke than BMT alone.

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 11/129/16. The contractual start date was in March 2013. The draft report began editorial review in August 2017 and was accepted for publication in January 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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