



**Cover image:** Bilobed basilar terminus aneurysm treated with Low Profile Visible Stent assisted coiling. From Conrad *et al.*, page 296.

**Editor**  
Robert W Tarr

**Associate Editors**

Felipe Albuquerque  
Michael Chen  
Dave Fiorella  
Rishi Gupta  
Joshua Hirsch  
Italo Linfante  
William Mack  
J Mocco  
Ansaar Rai

**Assistant Editor, Point-Counterpoint Section**

Kristine Blackham

**Assistant Editor, Book Review Section**

Albert Yoo

**Assistant Editor, Basic Science**

Matthew Gounis

**SNIS Executive Director**

Marie Williams

**Editorial Office**

Journal of NeuroInterventional Surgery BMJ Publishing Group Ltd  
BMA House  
Tavistock Square  
London, WC1H 9JR, UK

T: +44 (0)20 7383 6170

E: [info.jnis@bmjgroup.com](mailto:info.jnis@bmjgroup.com)

**Guidelines for authors and reviewers**

Full instructions are available online at <http://JNIS.bmj.com/fora>. Articles must be submitted electronically <http://mc.manuscriptcentral.com/jnis>. Authors retain copyright but are required to grant JNIS an exclusive licence to publish <http://JNIS.bmj.com/fora/licence.dtl>

ISSN: 1759-8478 (print)

ISSN: 1759-8486 (online)

**Disclaimer:** While every effort is made by the publishers and editorial board to see that no inaccurate or misleading data, opinions, or statements appear in this Journal, they wish to make it clear that the data and opinions appearing in the articles and advertisements herein are the responsibility of the contributor or advertiser concerned.

Accordingly, the publishers and the Society of NeuroInterventional Surgery, the editorial committee and their respective employees, officers and agents, accept no liability whatsoever for the consequences of any such inaccurate or misleading data, opinion or statement. While every effort is made to ensure that drug doses and other quantities are presented accurately, readers are advised that new methods and techniques involving drug usage, described within this Journal, should only be followed in conjunction with the drug manufacturer's own published literature.

**Copyright:** © 2014 Society of NeuroInterventional Surgery. All rights reserved; no part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise without prior permission.

Journal of NeuroInterventional Surgery is published by BMJ Publishing Group Ltd, typeset by Techset, India and printed in the USA.

Journal of NeuroInterventional Surgery (ISSN 1759-8478) is published ten times a year by BMJ Publishing Group and is distributed in the USA by Air Business Ltd. Periodicals postage paid at Jamaica NY 11431. POSTMASTER: send address changes to Journal of NeuroInterventional Surgery, Air Business Ltd, c/o Worldnet Shipping Inc., 156-15, 146th Avenue, 2nd Floor, Jamaica, NY 11434, USA.

**Editor's column**

**249** In search of the optimized stroke trial design  
*D Fiorella, J A Hirsch, J Mocco*

**Commentaries**

**252** Game changer for endovascular treatment of acute ischemic stroke?  
*M I Chimowitz*

**254** Acute stroke trials and consent  
*M Goyal*

**256** Acute stroke, Bayes' theorem and the art and science of emergency decision-making  
*M Goyal, K M Fargen, B K Menon*

**Ischemic stroke**

**260** ADAPT FAST study: a direct aspiration first pass technique for acute stroke thrombectomy  
*A S Turk, D Frei, D Fiorella, J Mocco, B Baxter, A Siddiqui, A Spiotta, M Mokin, M Dewan, S Quarfordt, H Battenhouse, R Turner, I Chaudry*

**265** Stentriever versus other endovascular treatment methods for acute stroke: comparison of procedural results and their relationship to outcomes  
*M Ribo, C A Molina, B Jankowitz, A Tomasello, S Zaidi, M Jumaa, P Coscojuela, J Oakley, J Alvarez-Sabin, T Jovin*

**270** Dexmedetomidine: a safe alternative to general anesthesia for endovascular stroke treatment  
*M K Whalin, S Lopian, K Wyatt, C-H J Sun, R G Nogueira, B A Glenn, R Y Gershon, R Gupta*

**276** Early carotid angioplasty and stenting may offer non-inferior treatment for symptomatic cases of carotid artery stenosis  
*M M Wach, T M Dumont, M Mokin, T Kass-Hout, K V Snyder, L N Hopkins, E I Levy, A H Siddiqui*

**Hemorrhagic stroke**

**281** Transvenous to arterial Onyx embolization  
*F C Albuquerque, A F Ducruet, R W Crowley, R E Bristol, A Ahmed, C G McDougall*

**286** Is a high initial World Federation of Neurosurgery (WFNS) grade really associated with a poor clinical outcome in elderly patients with ruptured intracranial aneurysms treated with coiling?  
*C Iosif, F Di Maria, N Sourour, V Degos, F Bonneville, A Biondi, B Jean, C Colonne, A Nouet, J Chiras, F Clarençon*

**291** Flow diversion versus traditional aneurysm embolization strategies: analysis of fluoroscopy and procedure times  
*N Chalouhi, J F McMahon, L A Moukartzel, R M Starke, P Jabbour, A S Dumont, S Tjoumakaris, E L Gingold, R Rosenwasser, L F Gonzalez*

**New devices**

**296** Y stenting assisted coiling using a new low profile visible intraluminal support device for wide necked basilar tip aneurysms: a technical report  
*M D Conrad, L B C Brasiliense, A N Richie, R A Hanel*

**301** Ultra-distal large-bore intracranial access using the hyperflexible Navien distal intracranial catheter for the treatment of cerebrovascular pathologies: a technical note  
*L-M Lin, G P Colby, J Huang, R J Tamargo, A L Coon*

**Neuroimaging**

**308** Addressing challenges in 4 F and 5 F arterial access for neurointerventional procedures in infants and young children  
*B A Gross, D B Orbach*

Scan here to listen to a podcast with Aquilla Turk on this issue's Editor's Choice article. Also scan here to listen to a podcast with Marc Chimowitz.

**MORE CONTENTS ▶**



This article has been chosen by the Editor to be of special interest or importance and is freely available online.



This article has been made freely available online under the BMJ Journals Open Access scheme. See <http://jnis.bmj.com/site/about/guidelines.xhtml#open>



COMMITTEE ON PUBLICATION ETHICS

This journal is a member of and subscribes to the principles of the Committee on Publication Ethics

<http://publicationethics.org/>



Receive regular table of contents by email. Register using this QR code.

**Basic science**

- 314** Safety of retained microcatheters: an evaluation of radiofrequency heating in endovascular microcatheters with nitinol, tungsten, and polyetheretherketone braiding at 1.5 T and 3 T

*A D Losey, P Lillaney, A J Martin, V V Halbach, D L Cooke, C F Dowd, R T Higashida, D A Saloner, M W Wilson, M Saeed, S W Hetts*

**Clinical neurology**

- 320** Safety and efficacy of ticagrelor for neuroendovascular procedures. A single center initial experience

*R A Hanel, P Tausky, T Dixon, D A Miller, M Sapin, J D Nordeen, R G Tawak, R Navarro, G Johns, W D Freeman*

**Spine**

- 324** Comparison of CT and fluoroscopic guidance for lumbar puncture in an obese population with prior failed unguided attempt

*A D Brook, J Burns, E Daur, A H Schoendfeld, T S Miller*

**Electronic pages**

- e25** Tandem symptomatic internal carotid artery and persistent hypoglossal artery stenosis treated by endovascular stenting and flow reversal

*J L Eller, S Jahshan, T M Dumont, P Kan, A H Siddiqui*

- e26** Aspiration thrombectomy in concert with stent thrombectomy

*T M Dumont, M Mokin, G C Sorokin, E I Levy, A H Siddiqui*

- e27** Occlusion of M1 segment after superficial temporal artery-middle cerebral artery bypass in a giant M1 aneurysm with Onyx-34 injected via a double-lumen balloon under balloon inflation

*F Clarençon, A Nouet, A Redondo, F Di Maria, C Iosif, L Le Jean, J Chiras, N Sourour*

- e28** Intermittent balloon occlusion to favor nidal penetration during embolization of arteriovenous malformations: a technique modification

*W O Bank, A B Stemer, R A Armonda, R S Bell*

- e29** Endovascular repair of a double-lumen dissecting aneurysm

*A K Johnson, C S Gerard, D K Lopes*

- e30** Blind endovascular catheterization and direct access of an occluded superior ophthalmic vein for treatment of carotid cavernous fistula

*A Alaraj, B Kim, G Oh, V Aletich*