



Cover image: Grading of Regional Apposition after Flow-Diverter Treatment (GRAFT) and comparative Intravascular OCT and Vaso CT images.

Editor

Robert W Tarr

Associate Editors

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

Associate Editor, Basic Science

Matthew Gounis

Assistant Editors, Social Media

Andrew Ducruet
Kyle Fargen

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

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)

Twitter: @JNIS_BMJ

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: © 2016 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 Nova Techset Private Limited, Bengaluru & Chennai, India and printed in the UK on acid free paper
Journal of NeuroInterventional Surgery (ISSN 1759-8478) is published monthly 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

767 Reappraisal of stroke systems of care
R Gupta

Commentary

768 Platelet function testing: does a randomized controlled trial settle the debate?
R V Chandra, N C Chan, T M Leslie-Mazwi, B P Mehta, J A Hirsch

Ischemic stroke

770 Drug eluting stents versus bare metal stents for the treatment of extracranial vertebral artery disease: a meta-analysis
V H Tank, R Ghosh, V Gupta, N Sheth, S Gordon, W He, S F Modica, C J Prestigiacomo, C D Gandhi

775 Severe hemiparesis as a prehospital tool to triage stroke severity: a pilot study to assess diagnostic accuracy and treatment times
R Gupta, M Manuel, K Owada, S Dhungana, L Busby, B A Glenn, D Brown, S A Zimmermann, C Horn, D Rochestie, J T Holmes, A K Johnson, A Khaldi

778 Mechanical thrombectomy with the Trevo ProVue device in ischemic stroke patients: does improved visibility translate into a clinical benefit?
C Kabbasch, A Mpotsaris, D-H Chang, S Hiß, F Dorn, D Behme, O Onur, T Liebig

783 Posterior circulation CT angiography collaterals predict outcome of endovascular acute ischemic stroke therapy for basilar artery occlusion
N Goyal, G Tsivgoulis, C Nickele, V T Doss, D Hoi, A V Alexandrov, A Arthur, L Eljovich

787 Initial experience using the 3MAX cerebral reperfusion catheter in the endovascular treatment of acute ischemic stroke of distal arteries
P Navia, J-A Larrea, E Pardo, A Arce, M Martínez-Zabaleta, N Díez-González, E Murias, L-A Arráez-Aybar, J Massó

Hemorrhagic stroke

791 Infundibular dilations of the posterior communicating arteries: pathogenesis, anatomical variants, aneurysm formation, and subarachnoid hemorrhage
C-J Chen, S Moosa, D Ding, D M Raper, R M Burke, C-C Lee, S Chivukula, T R Wang, R M Starke, R W Crowley, K C Liu

796 Endovascular parent vessel sacrifice in ruptured dissecting vertebral and posterior inferior cerebellar artery aneurysms: clinical outcomes and review of the literature
T P Madaelil, A N Wallace, A N Chatterjee, G J Zipfel, R G Dacey Jr, D T Cross III, C J Moran, C P Derdeyn

802 Delayed infarction following aneurysmal subarachnoid hemorrhage: Can the role of severe angiographic vasospasm really be dismissed?
A M Mortimer, B Steinfors, K Faulder, T Harrington

808 Clinical, morphological, and hemodynamic independent characteristic factors for rupture of posterior communicating artery aneurysms
Y Zhang, L Jing, J Liu, C Li, J Fan, S Wang, H Li, X Yang

Neuroimaging

813 Detection of aneurysmal subarachnoid hemorrhage 3 months after initial bleeding: evaluation of T2* and FLAIR MR sequences at 3 T in comparison with initial non-enhanced CT as a gold standard
S Mulé, S Soize, A Benaissa, C Portefaix, L Pierot

819 Radiation dose reduction during neurointerventional procedures by modification of default settings on biplane angiography equipment
E N Kahn, J J Gemmete, N Chaudhary, B G Thompson, K Chen, E G Christodoulou, A S Pandey

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>

COPE

Member since 2009

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

<http://publicationethics.org/>



- 824** Metal artifact reduction for flat panel detector intravenous CT angiography in patients with intracranial metallic implants after endovascular and surgical treatment



OPEN ACCESS

R Pjontek, B Önenköprülü, B Scholz, Y Kyriakou, G A Schubert, O Nikoubashman, A Othman, M Wiesmann, M A Brockmann

- 830** Usefulness of flat detector CT (FD-CT) with biplane fluoroscopy for complication avoidance during radiofrequency thermal rhizotomy for trigeminal neuralgia

H V I Easwer, N Chatterjee, A Thomas, K Santhosh, K T Raman, R Sridhar

New devices

- 834** Endovascular stroke therapy with the Aperio thrombectomy device

K Kallenberg, L Solymosi, C A Taschner, J Berkefeld, M Schlamann, O Jansen, S Arnold, B Tomandl, M Knauth, B Turowski

- 840** Intra-DIC (distal intracranial catheter) deployment of the Pipeline embolization device: a novel rescue strategy for failed device expansion

L-M Lin, G P Colby, B Jiang, N Nundkumar, J Huang, RJ Tamargo, A L Coon

Basic science

- 847** Grading of Regional Apposition after Flow-Diverter Treatment (GRAFT): a comparative evaluation of VasoCT and intravascular OCT



EDITOR'S CHOICE

K van der Marel, M J Gounis, J P Weaver, A M de Korte, R M King, J M Arends, O W Brooks, A K Wakhloo, A S Puri

- 853** Determination of a shear rate threshold for thrombus formation in intracranial aneurysms

D R de Sousa, C Vallecilla, K Chodzynski, R C Jerez, O Malaspinas, O F Eker, R Ouared, L Vanhamme, A Legrand, B Chopard, G Courbehaisse, K Z Boudjeltia

Spine

- 859** The efficacy and risks of preoperative embolization of spinal tumors

A-W Awad, K K Almefty, A F Ducruet, J D Turner, N Theodore, C G McDougall, F C Albuquerque

- 865** Physical characteristics of catheters used for subarachnoid drainage

A I Wong, S Gao, M D Bain, B Fitzsimons, F K Hui

Socioeconomics

- 868** MACRA: background, opportunities and challenges for the neurointerventional specialist

J A Hirsch, T M Leslie-Mazwi, A B Patel, J D Rabinov, R G Gonzalez, R M Barr, G N Nicola, R P Klucznik, C J Prestigiacomo, L Manchikanti

Electronic pages

- e29** Cerebral vascular findings in PAPA syndrome: cerebral arterial vasculopathy or vasculitis and a posterior cerebral artery dissecting aneurysm

K Khaibati, J J Heit, N A Telischak, J M Elbers, H M Do

- e30** Transvenous sclerotherapy of a large symptomatic orbital venous varix using a microcatheter balloon and bleomycin

V Vadlamudi, J J Gemmete, N Chaudhary, A S Pandey, A Kahana

- e31** Covered stents for exclusion of iatrogenic common carotid artery–internal jugular vein fistula and brachiocephalic artery pseudoaneurysm

S Kooraki, J Grohmann, S Elshikh, H Urbach, S Meckel

- e32** Initial experience of coiling cerebral aneurysms using the new Comaneci device

A L D Lawson, A Chandran, M Puthuran, T Goddard, H Nahser, T Patankar

- e33** Acute ischemic stroke in a child due to basilar artery occlusion treated successfully with a stent retriever

L Savastano, J J Gemmete, A S Pandey, C Roark, N Chaudhary