

**Cover image:** In-stent growth visualized with digital subtraction angiography, VasoCT, and histology. From Flood *et al.*, page 118.

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 Editors, Social Media Kyle Fargen

Brijesh Mehta

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

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.dt

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 heir 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: © 2015 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 US.

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.

# Contents

## **Commentaries**

**79** Endovascular therapy for acute ischemic stroke is indicated and evidence based: a position statement

J Mocco, D Fiorella, K M Fargen, F Albuquerque, M Chen, R Gupta, J A Hirsch, I Linfante, W Mack, A T Rai, R W Tarr

### 82 A research roadmap of future endovascular stroke trials

R Gupta, A T Rai, J A Hirsch, I Linfante, W Mack, J Mocco, F Albuquerque, M Chen, D Fiorella, R W Tarr

### **Ischemic stroke**

95

A meta-analysis of prospective randomized controlled trials evaluating endovascular therapics for acute incharging stroke

therapies for acute ischemic stroke

K M Fargen, D Neal, D J Fiorella, A S Turk, M Froehler, J Mocco

**90** Distal aspiration with retrievable stent assisted thrombectomy for the treatment of acute ischemic stroke

W Humphries, D Hoit, V T Doss, L Elijovich, D Frei, D Loy, G Dooley, A S Turk, I Chaudry, R Turner, J Mocco, P Morone, D Fiorella, A Siddiqui, M Mokin, A S Arthur

### Contemporary therapeutic strategies for occlusion of the artery of Percheron: a review of the literature

X Li, N Agarwal, D R Hansberry, C J Prestigiacomo, C D Gandhi

# **99** Discharge disposition to skilled nursing facility after endovascular reperfusion therapy predicts a poor prognosis

S R Belagaje, C-H J Sun, R G Nogueira, B A Glenn, L A Wuermser, V Patel, M R Frankel, A M Anderson, T T Thomas, C M Horn, R Gupta

# **104** Thrombus density predicts successful recanalization with Solitaire stent retriever thrombectomy in acute ischemic stroke

M Mokin, S Morr, S K Natarajan, N Lin, K V Snyder, L N Hopkins, A H Siddiqui, E I Levy **108** Direct carotid artery puncture access for endovascular treatment of acute ischemic stroke: technical aspects, advantages, and limitations

M Mokin, K V Snyder, E I Levy, L N Hopkins, A H Siddiqui

## **Basic science**

# **114** Early detachment of the Solitaire stent during thrombectomy retrieval: an in vitro investigation

H-J Kwon, J-Y Chueh, A S Puri, H-S Koh

- **118** Quantitative analysis of high-resolution,
- Contrast-enhanced, cone-beam CT for the
  - T F Flood, I M J van der Bom, L Strittmatter, A S Puri, G M Hendricks, A K Wakhloo, M J Gounis

# New devices

**126** Analysis of early angiographic outcome using unique large diameter coils in comparison with standard coils in the embolization of cerebral aneurysms: a retrospective review

J R Mascitelli, A B Patel, M F Polykarpou, A A Patel, H Moyle

> Scan here to listen to a podcast with Joshua Hirsch, J Mocco and David Fiorella on this issue's Editor's Choice article.



### MORE CONTENTS



C O P E COMMITTEE ON PUBLICATION ETHICS

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

http://publicationethics.org/

♦recycle

When you have finished with this please recycle it

network

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



NeuroIntervent Surg: first published as on 1 February 2015. Downloaded from http://jnis.bmj.com/ on May 23, 2025 at Department GEZ-LTA Erasmushogeschool.

## Neuroimaging

**131** Correlation of clot imaging with endovascular recanalization in internal carotid artery terminus occlusion

M Fujimoto, N Salamon, K Takemoto, H Takao, L Song, S Tateshima, F Viñuela

- **135** Contrast-enhanced time-resolved MRA for pre-angiographic evaluation of suspected spinal dural arterial venous fistulas *A M Saindane, S R Boddu, F C Tong, S Dehkharghani, J E Dion*
- **141** Practical techniques for reducing radiation exposure during cerebral angiography procedures *M S Pearl, C Torok, J Wang, E Wyse, M Mahesh,*

P Gailloud

# **Clinical Neurology**

**146** Current practice regarding seizure prophylaxis in aneurysmal subarachnoid hemorrhage across academic centers *M C Dewan, J Mocco* 

# **Socioeconomics**

**150** Hospital-based financial analysis of endovascular therapy and intravenous thrombolysis for large vessel acute ischemic strokes: the 'bottom line'

A T Rai, K Evans

# **Electronic pages**

- **e5** A single burr hole approach for direct transverse sinus cannulation for the treatment of a dural arteriovenous fistula *J M Caplan, I Kaminsky, P Gailloud, J Huang*
- **e6** Hybrid surgery for dural arteriovenous fistula in the neurosurgical hybrid operating suite *S-C Shen, Y-S Tsuei, W-H Chen, C-C Shen*
- e7 Retrograde trans-anterior communicating artery rescue of unopened Pipeline Embolization Device with balloon dilation: complication management

R Navarro, J Yoon, T Dixon, D A Miller, R A Hanel, R G Tawk

**e8** Very late stent thrombosis following the placement of a crossing Y-stent with dual closed-cell stents for the coiling of a wide-necked aneurysm

C-Y Lee, C-H Kim