



#### Editor in Chief

Brian D Sites (USA)

#### Associate Editor-in-Chief for Statistics

Matthew A Davis (USA)

#### Executive Editors

Richard Brull (Canada)  
Chad M Brummett (USA)  
Asokumar Buvanendran (USA)  
Xavier Capdevila (France)  
Steven P Cohen (USA)  
Yun Guan (USA)  
Ruth Landau (USA)  
Stavros Memtsoudis (USA)  
Anahi Perlas (Canada)  
De Q H Tran (Canada)  
Christopher L Wu (USA)

#### Editorial Office

BMJ Publishing Group Ltd, BMA House,  
Tavistock Square, London WC1H 9JR, UK  
T: +1 919 650 1459

F: +44 (0)20 7383 6668

E: [info.rapm@bmj.com](mailto:info.rapm@bmj.com)

Impact factor: 5.564

**Disclaimer:** The Editor of *Regional Anesthesia and Pain Medicine* has been granted editorial freedom and *Regional Anesthesia and Pain Medicine* is published in accordance with editorial guidelines issued by the World Association of Medical Editors and the Committee on Publication Ethics. *Regional Anesthesia and Pain Medicine* is primarily intended for healthcare professionals and its content is for information only. The Journal is published without any guarantee as to its accuracy or completeness and any representations or warranties are expressly excluded to the fullest extent permitted by law. Readers are advised to independently verify any information on which they choose to rely. Acceptance of advertising by *Regional Anesthesia and Pain Medicine* does not imply endorsement. Neither American Society of *Regional Anesthesia & Pain Medicine* nor BMJ Publishing Group Limited shall have any liability for any loss, injury or damage howsoever arising from *Regional Anesthesia and Pain Medicine* (except for liability which cannot be legally excluded).

**Copyright:** © 2022 American Society of Regional Anesthesia and Pain Medicine. All rights reserved; no part of this publication may be reproduced in any form without permission of *Regional Anesthesia and Pain Medicine*.

*Regional Anesthesia and Pain Medicine* is published by BMJ Publishing Group Ltd, typeset by Exeter Premedia Services Private Ltd, Chennai, India and printed in the UK on acid-free paper.

*Regional Anesthesia & Pain Medicine* ISSN 1472-0205 (USPS 580-990). BMA House, Tavistock Square, London WC1H 9JR, UK. The US annual subscription price is \$578.

Airfreight and mailing in the USA by agent named World Container Inc, 150-15, 183rd Street, Jamaica, NY 11413, USA. Periodicals postage paid at Brooklyn, NY 11256. US POSTMASTER: Send address changes to *Regional Anesthesia & Pain Medicine*, World Container Inc, 150-15, 183rd Street, Jamaica, NY 11413, USA. Subscription records are maintained at BMJ Publishing Group Ltd, 12th Floor, Southgate House, Wood Street, Cardiff, CF10 1GH, Wales. Air Business Ltd is acting as our mailing agent.

## Contents

Volume 47 Issue 12 | **RAPM** December 2022

### Research reports

- 719** Evaluation of lumbar medial branch blocks: how does the second block influence progression to radiofrequency ablation?  
*D A Provenzano, J E Leech, J S Kilgore, L A Sugden*

- 773** Stability of lidocaine solutions following sodium bicarbonate alkalization  
*S Hyuga, Y Tomoda, T Okutomi*

### Chronic and interventional pain

- 722** Stimulation holiday rescues analgesia after habituation and loss of efficacy from 10-kilohertz dorsal column spinal cord stimulation  
*R S D'Souza, Y F Her*

### Regional anesthesia and acute pain

- 728** Pericapsular nerve group (PENG) block for hip arthroscopy: a randomized, double-blinded, placebo-controlled trial  
*P E Amato, J R Coleman, T P Dobrzanski, D A Elmer, F W Gwathmey, Jr, A E Slee, N A Hanson*
- 733** The analgesic benefit of Pericapsular Nerve Group (PENG) block in hip arthroscopic surgery: a retrospective pragmatic analysis at an academic health center  
*V Patel, V Patel, F Abdallah, D Whelan, S Bansal, M Gabra, R Brull*
- 738** Comparison of sitting and prone positions for real-time ultrasound-guided thoracic epidural catheter placement: a randomized controlled trial  
*S Shin, J-H Lee, H-J Kwon, I Lee, D Kim, H Cho, D-H Kim, S-M Jeong*

- 744** Nerve stimulation guided bilateral pudendal nerve block versus landmark-based caudal block for hypospadias repair in young children: a prospective, randomized, pragmatic trial  
*D K Choudhry, L Heredia, B R Brenn, M Brown, N F Carvalho, M C Whaley, S S Shaik, J A Hagerty, A Bani Hani*
- 749** Efficacy of ultrasound-guided single-injection erector spinae plane block for thoracoscopic wedge resection: a prospective randomized control trial  
*B Klaibert, J Lohser, R Tang, M Jew, A McGuire, J Wilson*
- 755** Plasma bupivacaine levels (total and free/unbound) during epidural infusion in liver resection patients: a prospective, observational study  
*J Burjorjee, R Phelan, W M Hopman, A M-H Ho, S Nanji, D Jalink, G B Mizubuti*

### Education

- 762** Recommendations for anatomical structures to identify on ultrasound for the performance of intermediate and advanced blocks in ultrasound-guided regional anesthesia  
*T Ashken, J Bowness, A J R Macfarlane, L Turbitt, B Bellew, N Bedford, D Burckett-St Laurent, A Delbos, K El-Boghdady, N M Elkassabany, J Ferry, B Fox, J L H French, C Grant, A Gupta, R K Gupta, Y Gürkan, N Haslam, H Higham, R M G Hogg, D F Johnston, R J Kearns, C Lobo, S McKinlay, E R Mariano, S Memtsoudis, P Merjavy, M Narayanan, J A Noble, D Phillips, M Rosenblatt, A Sadler, M P Sebastian, E S Schwenk, A Taylor, A Thottungal, L F Valdés-Vilches, T Volk, S West, M Wolmarans, J Womack, A Pawa*

**MORE CONTENTS ►**



EDITOR'S CHOICE



OPEN ACCESS

C O P E

Member since 2008  
JM00025

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

[www.publicationethics.org](http://www.publicationethics.org)



---

**Brief technical report**

- 775** Color flow Doppler in spinal ultrasound: a novel technique for assessment of catheter position in labor epidurals  
*O F C van den Bosch, Y Gleicher, C Arzola, N Siddiqui, K Downey, J C A Carvalho*
- 

**Letters**

- 780** Assessing postoperative benefits of regional blocks: an issue that should be noticed  
*F-S Xue, N He, Y Cheng*

- 780** Reply to 'assessing postoperative benefits of regional blocks: an issue should be noticed'  
*M Carella, F Beck, N Piette, J-P Lecoq, V L Bonhomme*
- 781** Problem with non-inferiority margin: a letter to the editor  
*C Cai, R Shi, Y Wang*
- 781** Comparison of postoperative analgesic effects of posterior quadratus lumborum block and intrathecal morphine in laparoscopic donor hepatectomy: in reply  
*R Kang, S Lee, J S Ko*