

Journal of the British Association of Sport and Exercise Medicine

#### **Editor-in-Chief**

Jonathan Drezner (USA)

#### Fditors

Joanne Kemp (Australia) Nonhlanhla Mkumbuzi (South Africa) Jon Patricios (South Africa) Jane Thorton (Canada)

#### **Editorial Office**

BMJ Publishing Group Ltd **BMA** House Tavistock Square London WC1H 9JR, UK E: bjsm@bmj.com X: @BJSM BMJ

#### **Guidelines for Authors and Reviewers**

Full instructions are available online at http://bjsm.bmj.com/pages/authors/. Articles must be submitted electronically http://bjsm.bmj.com/pages/authors/. Authors retain copyright but are required to grant BJSM an exclusive licence to publish (http://authors.bmj.com/ submitting-your-paper/copyright-andauthors-rights/).

ISSN: 0306-3674 (print) ISSN: 1473-0480 (online) Impact factor: 18.4

Disclaimer: The Editor of British Journal of Sports Medicine has been granted editorial freedom and British Journal of Sports Medicine is published in accordance with editorial guidelines issued by the World Association of Medical Editors and the Committee on Publication Ethics. British Journal of Sports 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 British Journal of Sports Medicine does not imply endorsement. Neither BASEM nor BMJ Publishing Group Limited shall have any liability for any loss, injury or damage howsoever arising from British Journal of Sports Medicine (except for liability which cannot be legally excluded).

Copyright: © 2024 BMJ Publishing Group Ltd and British Association of Sport and Exercise Medicine. All rights reserved; no part of this publication may be reproduced in any form without permission.

BJSM is published by BMJ Publishing Group Ltd, typeset by Exeter Premedia Services Private Ltd, Chennai, India and printed in the UK on acid-free

British Journal of Sports Medicine, ISSN 0306-3674 (USPS 3957) is published bimonthly by BMJ Publishing Group Ltd, BMA House, Tavistock Square, WC1H 9JR London. 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 British Journal of Sports Medicine, World Container Inc, 150-15, 183rd Street, Jamaica, NY 11413, USA. Subscription records are maintained at BMA House, Tavistock Square, WC1H 9JR London. Air Business Ltd is acting as our mailing agent

# Warm up

Safe sport for all! A M Bruder, J L Kemp

### **Editorials**

754 6

'Subconcussive' is a dangerous misnomer: hits of greater magnitude than concussive impacts may not cause symptoms

CJ Nowinski, H C Rhim, A C McKee, RD Zafonte, DW Dodick, RC Cantu, D H Daneshvar

**756** Women are disproportionately impacted by knee and hip osteoarthritis: why does this happen and how can we address it? A M Bruder, M J Haberfield, M J M O'Brien,

758 Bridging the gap between strengthspan and lifespan

> A D Faigenbaum, A Garcia-Hermoso, J P MacDonald, A Mortatti, T Rial Rebullido

**760** 6 We want healthy athletes and fair competition

Y P Pitsiladis, F Pigozzi, M Geistlinger, J Kawazoe Lazzoli, M Zahar, N Bachl, P Manonelles Marqueta, W O Roberts, K-M Braumann, EH De Rose, D Constantinou, A Ionescu, C Schneider, P S-H Yung, X Bigard, International Federation of Sports Medicine (FIMS)



#### Pre-event 'medical time out'

R Courson, G Henry, K Borque, D J Casa, M S Collins, C Eason, G Elkins, J Ellis, W Fitch, R Hunt, J Kyle, L J Lemak, B Mandelbaum, K Morley, CS O'Neal, RS Rehberg, F Reifsteck, S E Scarneo-Miller, A Sills

# Subscription information

British Journal of Sports Medicine is published monthly; subscribers receive all supplements

### Institutional rates 2024

Print £1201

Online Site licences are priced on FTE basis and allow access by the whole institution. Details available online at http://journals.bmj.com/content/subscribers?bjsm

## Personal rates 2024

Print (includes online access at no additional cost) £404

### Online only £231

ISSN 0306-3674 (print); 1473-0480 (online)

Personal print or online only and institutional print subscriptions may be purchased online at http://group.bmj.com/subscribe/?bjsm (payment by Visa/ Mastercard only) Residents of some EC countries must pay VAT; for details, call us or http://journals.bmj. com/content/subscribers?bjsm

# **Original research**



Baseline clinical and MRI risk factors for hamstring reinjury showing the value of performing baseline MRI and delaying return to play: a multicentre, prospective cohort of 330 acute hamstring injuries M I Zein, M J K Mokkenstorm, M Cardinale, L Holtzhausen, R Whiteley, M H Moen, G Reurink, J L Tol, for the Qatari and Dutch Hamstring Study Group



The power of Para sport: the effect of performancefocused swimming training on motor function in adolescents with cerebral palsy and high support needs (GMFCS IV) – a single-case experimental design with 30-month follow-up

I M Dutia, M Connick, E Beckman, L Johnston, P Wilson, A Macaro, I O'Sullivan, S Tweedy

785 Health problems among elite Dutch youth long track speed skaters: a one-season prospective study

M Hendricks, A T M van de Water, E Verhagen

#### Review



Are adjunct treatments effective in improving pain and function when added to exercise therapy in people with patellofemoral pain? A systematic review with meta-analysis and appraisal of the quality of interventions L R Souto, D De Oliveira Silva, M F Pazzinatto, M S Sigueira, R F C Moreira, F V Serrão

# Images in sports medicine

805 Shoulder instability

> C Canella, C Ávila de Almeida, B B Forster, R Aguiar

# **PhD Academy Award**

What goes up must come down: injury and jumping in professional ballet (PhD Academy Award)

A Mattiussi



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://bjsm.bmj.com/site/about/guidelines.xhtml#open



This journal is a member of and subscribes to the principles of the Committee on Publication Ethics www.publicationethics.org



The online version of this article contains multiple choice questions hosted on BMJ Learning.