

Cover image: Taken from Toyama *et al.* The extent of stretched lamellar cleavage and visual acuity in macular pseudoholes. See page 1227.

### **Editors-in-Chief**

Keith Barton (UK) Jost Jonas (Germany) James Chodosh (USA)

### **Editorial Office**

BMJ Publishing Group Ltd, BMA House, Tavistock Square, London WC1H 9JR, UK

T: +44 (0)20 7383 6170 F: +44 (0)20 7383 6668

E: bjo@bmj.com

Twitter: @BJOphthalmology

ISSN: 0007-1161 (print) ISSN: 1468-2079 (online)

#### Impact factor: 3.036

**Disclaimer:** British Journal of Ophthalmology is owned and published by BNJ Publishing Group Ltd. a wholly owned subsidiary of the British Medical Association. The owner grants editorial freedom to the Editor of British Journal of Ophthalmology.

British Journal of Ophthalmology follows guidelines on editorial independence produced by the World Association of Medical Editors and the code on good publication practice of the Committee on Publication Ethics.

British Journal of Ophthalmology is intended for medical professionals and is provided without warranty, express or implied. Statements in the journal are the responsibility of their authors and advertisers and not authors' institutions, the BMJ Publishing Group Ltd or the BMA unless otherwise specified or determined by law. Acceptance of advertising does not imply endorsement.

To the fullest extent permitted by law, the BMJ Publishing Group Ltd shall not be liable for any loss, injury or damage resulting from the use of British Journal of Ophthalmology or any information in it whether based on contract, tort or otherwise. Readers are advised to verify any information they choose to rely on

Copyright: © 2016 BMJ Publishing Group Ltd. 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 with out the prior permission of British Journal of Ophthalmology.

British Journal of Ophthalmology 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.

British Journal of Ophthalmology (ISSN 0007-1161) 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 British Journal of Ophthalmology, Air Business Ltd, c/o Worldnet Shipping Inc., 156-15, 146th Avenue, 2nd Floor, Jamaica, NY 11434, USA.

# Contents

# vents Volume 100 Issue 9 | BJO September 2016

## **Global issues**

**1157** Blindness, cataract surgery and mortality in Ethiopia

B J Thomas, D S Sanders, M S Oliva, M S Orrs, P Glick, S Ruit, W Chen, J Luoto, A K Tasfaw, G C Tabin

### Review

**1163** Established and emerging ancillary techniques in management of microbial keratitis: a review *D Robaei, N Carnt, S Watson* 

### **Clinical science**

1171 Prosthetic replacement of the ocular surface 6 ecosystem: impact at 5 years

OPEN ACCESS J S Agranat, N R Kitos, D S Jacobs

1176 Aetiology-specific comparison of long-term outcome of deep anterior lamellar keratoplasty for corneal diseases

> A Ogawa, T Yamaguchi, H Mitamura, D Tomida, S Shimazaki-Den, D Murat, Y Satake, J Shimazaki

1183 Differential precision of corneal Pentacam HR measurements in early and advanced keratoconus

TH Flynn, DP Sharma, CBunce, MR Wilkins

**1188** Evaluation of point-of-care test for elevated tear matrix metalloproteinase 9 in post-LASIK dry eyes

T C Y Chan, C Ye, K P Chan, K O Chu, V Jhanji

**1192** Five-year results of Small Incision Lenticule Extraction (ReLEx SMILE)

M Blum, K Täubig, C Gruhn, W Sekundo, K S Kunert

**1196** Corneal powers measured with a rotating Scheimpflug camera

K Næser, G Savini, J F Bregnhøj

1201 Evaluation and comparison of the new swept source OCT-based IOLMaster 700 with the OPEN ACCESS IOLMaster 500

A Akman, L Asena, S G Güngör

**1206** Incidence and factors associated with complications of sutured and sutureless cataract surgery following pars plana vitrectomy at a tertiary referral centre in Turkey *M Hocaoglu, M Karacorlu, I S Muslubas, H Ozdemir, S Arf, O Uysal* 

**1211** Vitrectomy After ocriplasmin for VitreOmacular adhesion Or Macular hole (VAVOOM) study *M A Greven, S Garg, B Chiu, S P Shah, J Wolfe, H F Fine, D B Roth, J Robinson, J Mong, J Hsu, C Regillo, A Ho, J A Haller* 

- **1216** Epidemiology and clinical characteristics of rhegmatogenous retinal detachment in Taiwan *S-N Chen, I-B Lian, Y-I Wei*
- **1221** Phase Ilb clinical trial of ranibizumab for the treatment of uveitic and idiopathic choroidal neovascular membranes

E Carreño, T Moutray, K Fotis, R W J Lee, A D Dick, A H Ross, C Bailey

- **1227** The extent of stretched lamellar cleavage and visual acuity in macular pseudoholes

  T Toyama, M F Roggia, T Yamaguchi, Y Noda,
  T Ueta
- 1232 Macular nerve fibre and ganglion cell layer changes in acute Leber's hereditary optic neuropathy

N Balducci, G Savini, M L Cascavilla, C La Morgia, G Triolo, R Giglio, M Carbonelli, V Parisi, A A Sadun, F Bandello, V Carelli, P Barboni

Correlation of central visual function and ROP risk factors in prematures with and without acute ROP at the age of 6–13 years: the Giessen long-term ROP study

W Bowl, B Lorenz, K Stieger, S Schweinfurth, K Holve, C Friedburg, M Andrassi-Darida

**1245** Perceptual visual dysfunction, physical impairment and quality of life in Bangladeshi children with cerebral palsy

D Mitry, C Williams, K Northstone, A Akter, J Jewel, N Khan, M Muhit, C E Gilbert, R Bowman

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://bjo.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.uk

Receive regular table of contents by email.

Register using this QR code.





- **1251** The height of the posterior staphyloma and corneal hysteresis is associated with the scleral thickness at the staphyloma region in highly myopic normal-tension glaucoma eyes *J H Park, K-R Choi, C Y Kim, S S Kim*
- **1257** Microcatheter-assisted trabeculotomy versus rigid probe trabeculotomy in childhood glaucoma

Y Shi, H Wang, J Yin, M Li, X Zhang, C Xin, X Chen, N Wang

**1263** Monitoring ocular hypertension, how much and how often? A cost-effectiveness perspective R Hernández, J M Burr, L Vale, A Azuara-Blanco, J A Cook, K Banister, A Tuulonen, M Ryan, for the Surveillance of Ocular Hypertension Study group

**1269** Comparison of trabeculectomy versus Ex-PRESS: 3-year follow-up

J M Gonzalez-Rodriguez, G E Trope, L Drori-Wagschal, D Jinapriya, Y M Buys

- **1274** Association between light-to-dark changes in angle width and iris parameters in light, dark and changes from light-to-dark conditions *R Y Lee, S-C Lin, R I Chen, D T Barbosa, S C Lin*
- **1280** Enlargement of the superior rectus and superior oblique muscles causes intorsion in Graves' eye disease

Y Wei, X li Kang, M A Del Monte

**1285** Clinical features, microbiological profiles and treatment outcome of lacrimal plug-related canaliculitis compared with those of primary canaliculitis

Y-Y Huang, W-K Yu, C-C Tsai, S-C Kao, H-C Kau, C Jui-Ling Liu

**1290** Scleritis associated with relapsing polychondritis

M Sainz-de-la-Maza, N Molina, L A Gonzalez-Gonzalez, P P Doctor, J Tauber, C S Foster

- **1295** Implications of enlarged infraorbital nerve in idiopathic orbital inflammatory disease *K H Lee, S H Han, J S Yoon*
- **1301** Clinical manifestations and outcome of tuberculous sclerokeratitis

  S. S. Shoughy, M. O. Jaroudi, K. F. Tabbara

## **Laboratory science**

1304 S100A8 and S100A9 proteins are expressed by human corneal stromal dendritic cells A Wilkinson, N Kawaguchi, C Geczy, N Di Girolamo