

Cover caption: Hepatitis B viruses, coloured transmission electron micrograph (TEM). They are a cause of liver inflammation. The smaller cricles and the rod-shaped objects are surplus viral coat (capacial portein from infected liver cells. These non- infectious antigens (toreign porteins) are used to make vaccines against hepatitis B is transmitted by infected blood, passed mainly through sexual intercourse or the sharing of needles by intervenus drug users. Symptoms include headache, fever, weakness and jourdice. Magnification unknown. Cover cridt: DR LINDA STANNARD, UCT / SOENCE PHOTO LIBRARY.

Journal of the British Society of Gastroenterology

Impact Factor: 9.35 Editor

Professor Emad El-Omar (UK)

**Deputy Editor (Hepatology)** Alexander Gerbes (Germany)

Deputy Editor (Luminal Gastroenterology) Severine Vermeire (Belgium)

### Associate Editors

Ramon Bataller (Spain) Guy Boeckxstaens (Belguim) Laurence Egan (Ireland) William Grady (USA) Thomas Gress (Germany) Ernst Kuipers (The Netherlands) Herbert Tilg (Austria) Fabien Zoulim (France)

### **Editorial Office**

Gut BMJ Journals BMA House, Tavistock Square London, WC1H 9JR, UK T: +44 (0)20 7383 6394

### F: +44 (0)20 7383 6668 E: guteditorial@bmjgroup.com

ISSN: 0017-5749 (print) ISSN: 1468-3288 (online)

Disclaimer: Gut is owned and published by BMJ Publishing Group Ltd, a wholly owned subsidiary of the British Medical Association and the British Society of Gastroenterology. The owners grant editorial freedom to the Editor of Gut. Gut 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.

Gut 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, the British Society of Gastroenterology 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 shall not be liable for any loss, injury or damage resulting from the use of Gut 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** © 2011 BMJ Publishing Group and British Society of Gastroenterology. 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

Gut is published by BMJ Publishing Group Ltd, typeset by TNQ Books & Journals, Chennai, India and printed in the UK on acid-free paper from sustainable forests by Latimer Trend & Co Ltd, Plymouth, UK

Gut (ISSN 0017-5749) is published monthly by BMJ Publishing Group and distributed in the USA by Mercury International Ltd. Periodicals postage paid at Rahway, NJ. POSTMASTER: send address changes to Gut, Mercury International Ltd, 365 Biair Road, Avenel, NJ, OTOI, USA.

### **Commentary**

Contents

1 Not every cell is as it seems: a role for ductular epithelial cells in fibrosis?

E E Powell, J R Jonsson, A D Clouston

### Leading article

**3** Predicting the need for colectomy in severe ulcerative colitis: a critical appraisal of clinical parameters and currently available biomarkers *S Travis, J Satsangi, M Lémann* 

### **Oesophagus**

Predictors for outcome of failure of balloon dilatation in patients with achalasia

J Alderliesten, J M Conchillo, I Leeuwenburgh, E W Steyerberg, E J Kuipers

# Nutrition

17 Long-term follow-up of patients on home parenteral nutrition in Europe: implications for intestinal transplantation

L Pironi, F Joly, A Forbes, V Colomb, M Lyszkowska, J Baxter, S Gabe, X Hébuterne, M Gambarara, F Gottrand, C Cuerda, P Thul, B Messing, O Goulet, M Staun, A Van Gossum, Home Artificial Nutrition & Chronic Intestinal Failure Working Group of the European Society for Clinical Nutrition and Metabolism (ESPEN)

# Endoscopy

# Confocal laser endomicroscopy is a new imaging modality for recognition of intramucosal bacteria in inflammatory bowel disease in vivo

D Moussata, M Goetz, A Gloeckner, M Kerner, B Campbell, A Hoffman, S Biesterfeld, B Flourie, J-C Saurin, P R Galle, M F Neurath, A J M Watson, R Kiesslich

### **Small bowel**

41

- **34** Acute appendicitis is characterised by local invasion with *Fusobacterium nucleatum/ necrophorum* 
  - A Swidsinski, Y Dörffel, V Loening-Baucke, F Theissig, J C Rückert, M Ismail, W A Rau, D Gaschler, M Weizenegger, S Kühn, J Schilling, W V Dörffel

### Inflammatory bowel disease

The immunogenic part of infliximab is the F(ab')<sub>2</sub>, but measuring antibodies to the intact infliximab molecule is more clinically useful *S Ben-Horin, M Yavzori, L Katz, U Kopylov, O Picard, E Fudim, D Coscas, S Bar-Meir, I Goldstein, Y Chowers* 

# **49** Antibiotic use and inflammatory bowel diseases in childhood

A Hviid, H Svanström, M Frisch

**55** Sphingomyelin induces cathepsin D-mediated apoptosis in intestinal epithelial cells and increases inflammation in DSS colitis *A Fischbeck, K Leucht, I Frey-Wagner, S Bentz, T Pesch, S Kellermeier, M Krebs, M Fried,* 

G Rogler, M Hausmann, H-U Humpf

## **Colon cancer**

**66** Concentration of folate in colorectal tissue biopsies predicts prevalence of adenomatous polyps

A Flood, J B Mason, Z Liu, B D Cash, A Schatzkin, P S Schoenfeld, A J Cross

**73** High detection rate of adenomas in familial colorectal cancer

A E van der Meulen-de Jong, H Morreau, M C J M Becx, L F S J Crobach, M van Haastert, W R ten Hove, J H Kleibeuker, M A C Meijssen, F M Nagengast, M C M Rijk, J M J I Salemans, A Stronkhorst, H A R E Tuynman, J Vecht, M L Verhulst, W H de Vos tot Nederveen Cappel, H Walinga, O K Weinhardt, B D Westerveld, A M C Witte, H J Wolters, H F A Vasen

### **Pancreas**

**77** Type of pain, pain-associated complications, quality of life, disability and resource utilisation in chronic pancreatitis: a prospective cohort study

D K Mullady, D Yadav, S T Amann, M R O'Connell, M M Barmada, G H Elta, J M Scheiman, E-J Wamsteker, W D Chey,

- M L Korneffel, B M Weinman, A Slivka,
- S Sherman, R H Hawes, R E Brand, F R Burton,
- M D Lewis, T B Gardner, A Gelrud, J DiSario,
- J Baillie, P A Banks, D C Whitcomb,
- M A Anderson, for the NAPS2 Consortium

#### MORE CONTENTS



Articles carrying the Unlocked Logo are freely available online under the BMJ Journals unlocked scheme. See http://gut.bmj.com/info/unlocked.dtl

COPE COMMITTEE ON PUBLICATION ETHICS

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

www.publicationethics.org.uk



# **Hepatology**

**85** Changing trends in malignant transformation of hepatocellular adenoma

O Farges, N Ferreira, S Dokmak, J Belghiti, P Bedossa, V Paradis

**90** Amelioration of hepatic fibrosis by NK cell activation

N Muhanna, L A Tair, S Doron, J Amer, M Azzeh, M Mahamid, S Friedman, R Safadi

**99** Hepatitis B viraemia: its heritability and association with common genetic variation in the interferon γ signalling pathway *H-H Huang, W-L Shih, Y-H Li, C-F Wu, P-I Chen, C-L Lin, C-I Liu, Y-F Liaw, S-M Lin,* 

P-J Chen, C-L Lin, C-J Liu, Y-F Liaw, S-M Lin, S-D Lee, M-W Yu

**108** Insulin resistance and necroinflammation drives ductular reaction and epithelial-mesenchymal transition in chronic hepatitis C

G Svegliati-Baroni, G Faraci, L Fabris, S Saccomanno, M Cadamuro, I Pierantonelli,

L Trozzi, E Bugianesi, M Guido, M Strazzabosco,

A Benedetti, G Marchesini

# **Recent advances in basic science**

- **116** Colorectal cancer molecular biology moves into clinical practice
- C C Pritchard, W M Grady

## **Recent advances in clinical practice**

**130** Management of acute severe ulcerative colitis

G Van Assche, S Vermeire, P Rutgeerts

# JournalScan

**134** GI Highlights from the literature

# **PostScript**

136 Letters

140 Corrections

### Editor's quiz: GI snapshot 9 Asteroids in the blood

Asteroids in the blood I Böhm

**16** Gastric polypoid lesion after gastrectomy *H-L Chen, M-J Bair, I-T Lin, C-H Wu, Y-J Chen*