Journal of the British Society of Gastroenterology which is a registered charity

Editor: Michael J G Farthing

Associate Editors: David Adams, John Atherton, Ian Forgacs (reviews, editorials) Thomas T MacDonald, Jan Tack, Nicholas A Wright

Evidence-Based Gastroenterology Advisory Group: Richard F A Logan, Stephen J W Evans, Andrew Hart, Jane Metcalf

Managing Editor: Andrea Horgan

Technical Editors: Linda Gough, Josie Stephenson

Editorial Office Manager: Claire Castle

Editorial Assistants: Alex Hodge, Hannah Schlesinger

EDITORIAL COMMITTEE

M J P Arthur (UK) K E Barrett (USA) E Beubler (Austria) M K Bhan (India)

M Blaser (USA) H Buller (The Netherlands)

I Calam (UK)

R W Chapman (UK) T Chiba (Japan)

S Collins (Canada) E Corazziari (Italy)

A M Di Bisceglie (USA) L Greco (Italy)

R H Holloway (Australia) P J Kahrilas (USA)

M A Kamm (UK) N F LaRusso (USA)

L Lundell (Sweden)

S J W Evans (UK)

O Lundgren (Sweden)

P Malfertheiner (Germany)

D Martin (UK) (USA)

E Mayer (USA) K Moore (UK)

M F Neurath (USA)

M Novelli (UK)

F Pallone (Italy)

R H Riddell (Canada)

S Schalm (The Netherlands)

S Schreiber (Germany)

M Swain (Canada)

D Schuppan (Germany)

J J Y Sung (Hong Kong)

I Tomlinson (UK)

G Triadafilopoulos (USA)

Z Tulassay (Hungary)

S J H van Deventer (The Netherlands)

Editor British Medical Journal

Local editions

China: Excerpta Medica Asia Ltd, 19/F Eight Commercial Tower, 8 Sun Yip Street, Chai Wang, Hong Kong. Tel: +852 2956 1300; Fax: +852 2976 0778
Netherlands/Belgium: Medicom Excel, Box 151, 1400 AD Bussum, Netherlands. Tel: +31 35 69 52480; Fax: +31 35 69 48565

NOTES TO ADVERTISERS Applications for advertisement space and for rates should be addressed to the Advertisement Manager, *Gut*, BMJ Publishing Group, BMA House, Tavistock Square, London WC1H 9JR.

NOTICE TO SUBSCRIBERS *Gut* is published monthly. The annual subscription rates for institutions are £300 (USA \$462) for print only. Online licences are priced on the FTE basis and allow access by the whole institution. Institutions that opt for online access may purchase print at deeply discounted rates. Personal subscription rates which include online access are £125 (\$199). Enquiries regarding rates and orders should be sent to the Subscription Manager, *Gut*, BMJ Publishing Group, BMAHouse, Tavistock Square, London WC1H 9JR. Subscribers may pay for their subscriptions by Mastercard, Visa, or American Express, by quoting on their order the credit or chargecard preferred, together with the appropriate personal account number and expiry date of the card. Orders can also be placed with any leading subscription the appropriate personal account number and expiry date of the card. Orders can also be placed with any leading subscription agent or bookseller. (For the convenience of readers in the USA subscription orders, with or without payment, may also be sent to the BMJ Publishing Group, PO Box 590A, Kennebunkport, ME 04046, USA. Tel: 001 800 236 6265. All enquiries, however, must be addressed to the publisher in London.) All enquiries regarding air mail rates and single copies already published should be addressed to the publisher in London.

COPYRIGHT © 2001 Gut. This publication is copyright under the copyright under the Berne Convention and the International Copyright Convention. All rights reserved. Apart from any relaxations permitted under national copyright laws, no part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means without the prior permission of the copyright owners. Permission is not, however, required to copy abstracts of papers or of articles on condition that a full reference to the source is shown. Multiple copying of the contents of the publication without permission is always illegal. Periodicals postage paid, Rahway NJ. Post-master: send address changes to: Gut, c/o Mercury Airfreight International Ltd., 365 Blair Road, Avenel, NJ 07001, USA.

ISSN 0017-5749

ISSN 1468-3288 (electronic Gut)

Gut is now available full text online: www.gutinl.com

Published by the BMJ Publishing Group Printed in UK on acid free paper by Cambrian Printers,

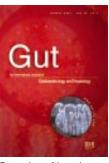


Volume 49 Number 2 August 2001

Intestinal zonulin: open sesame! A Fasano

The father figure in coeliac disease L Greco

Signals on the immune tract M F Neurath Descartes and the gut: "I'm pink therefore I



Detection of keratinocyte growth factor mRNA by in situ hybridisation. (From the paper by Salvati et al, pp 176-81.)

am" D G Thompson

Science @lert

Leading article

Commentaries

163

164

165

Serum antibody responses to Clostridium difficile toxin A: predictive and protective? C Phillips

Small intestine

- C169 Coeliac disease in the father affects the newborn J F Ludvigsson, J Ludvigsson
- Keratinocyte growth factor and coeliac disease 176 V M Salvati, M Bajaj-Elliott, R Poulsom, G Mazzarella, K É Á Lundin, E M Nilsen, R Troncone, T T MacDonald

182 Erythropoietin acts as a trophic factor in neonatal rat intestine S E Juul, D J Ledbetter, A E Joyce, C Dame, R D Christensen, Y Zhao, V DeMarco

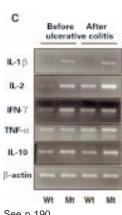
Inflammation and inflammatory bowel disease

C190 Loss of transforming growth factor β signalling in the intestine contributes to tissue injury in inflammatory bowel disease K-B Hahm, Y-H Im, T W Parks, S-H Park, S Markowitz, H-Y Jung, J Green, S-J Kim

Inflammatory bowel disease and laterality: is left handedness a risk? D L Morris, S M Montgomery, M L Galloway, R E Pounder, A J Wakefield

Motility and visceral sensation

- 203 Perception of changes in wall tension of the proximal stomach in humans H Piessevaux, J Tack, A Wilmer, B Coulie, A Geubel, J Janssens
- C209 Relationship between psychological state and level of activity of extrinsic gut innervation in patients with a functional gut disorder A V Emmanuel, H J Mason, M A Kamm
- 214 Response to a behavioural treatment, biofeedback, in constipated patients is associated with improved gut transit and autonomic innervation A V Emmanuel, M A Kamm



See p 190

contents GUT

Volume 49 Number 2 August 2001

220 SOX10 is abnormally expressed in aganglionic bowel of Hirschsprung's disease infants M H Sham, V C H Lui, M Fu, B Chen, P K H Tam

Cancer

- 227 The prognostic value of quality of life scores during treatment for oesophageal cancer *J M Blazeby, S T Brookes, D Alderson*
- 231 Decision analysis in the surgical treatment of patients with familial adenomatous polyposis: a Dutch-Scandinavian collaborative study including 659 patients *H F A Vasen*, *P van Duijvendijk*, *E Buskens*, *C Bülow*, *J Björk*, *H J Järvinen*, *S Bülow*
- 236 Overexpression of the *CD155* gene in human colorectal carcinoma *D Masson, A Jarry, B Baury, P Blanchardie, C Laboisse, P Lustenberger, M G Denis*

W C J Hop, the Dutch Multicentre PBC study group

- 282 Osteoporosis in primary biliary cirrhosis revisited *J Newton, R Francis, M Prince, O James, M Bassendine, D Rawlings, D Jones*
- 288 Association of the tumour necrosis factor α –308 but not the interleukin 10 –627 promoter polymorphism with genetic susceptibility to primary sclerosing cholangitis S A Mitchell, J Grove, A Spurkland, K M Boberg, K A Fleming, C P Day, E Schrumpf, R W Chapman, the European Study Group of Primary Sclerosing Cholangitis



See p 241

Occasional report

Review

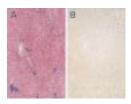
303

295 International gastroenterology research: subject areas, impact, and funding *G Lewison, J Grant, P Jansen*

Angiotensin converting enzyme inhibitors

and angiotensin II antagonists as therapy

J Vlachogiannakos, A K W Tang,



See p 276

Pancreatic disease

- 241 Arginine induced acute pancreatitis alters the actin cytoskeleton and increases heat shock protein expression in rat pancreatic acinar cells *M Tashiro, C Schäfer, H Yao, S A Ernst. J A Williams*
- 251 Interferon γ inhibits growth of human pancreatic carcinoma cells via caspase-1 dependent induction of apoptosis K M Detjen, K Farwig, M Welzel, B Wiedenmann, S Rosewicz

jen, K Farwig, W Weizei, 309 Which PPI? M J S Langman

Liver disease

- 263 Interferon responsiveness in patients infected with hepatitis C virus 1b differs depending on viral subtype I Nakano, Y Fukuda, Y Katano, H Toyoda, K Hayashi, T Hayakawa, T Kumada, S Nakano
- 268 The cardiac response to exercise in cirrhosis *F Wong, N Girgrah, J Graba, Y Allidina, P Liu, L Blendis*
- 276 Jaundice in non-cirrhotic primary biliary cirrhosis: the premature ductopenic variant F P Vleggaar, H R van Buuren, P E Zondervan, F J W ten Kate,

Letters to the editor

Therapy update

in chronic liver disease

D Patch, A K Burroughs

- 311 Ulcerative colitis is more strongly linked to chromosome 12 than Crohn's disease *M Parkes, J Satsangi, D P Jewell, D E Weeks, M M Barmada, R H Duerr,*
- 312 Intestinal permeability: the cellobiose/mannitol test *R M Craig*,
- 312 Evaluation of the role of CFTR in alcohol related pancreatic disease *J Ockenga*, *M Stuhrmann*, *M P Manns*
- 313 Alcohol, obesity, and TNF-α *A Poullis, M A Mendall*
- 314 Book reviews Corrections Notes