Vol. 34, 2012

Official Journal of the International Society of Blood Purification (ISBP)
Official Journal of the Japan Society for Blood Purification in Critical Care (JSBPCC)
Official Journal of the Japanese Society of Hemodiafiltration (JS-HDF)
Official Journal of the Chinese Society of Blood Purification Administration (CSBPA)

Blood Purification


Editor-in-Chief
C. Ronco, Vicenza

Assistant Editor
S. Chiaramonte, Vicenza

Associate Editors
P. Aljama, Cordoba
R. Bellomo, Melbourne, Vic.
D.N. Cruz, Vicenza
A. Davenport, London
W.L. Henrich, San Antonio, Tex.
H. Kawanishi, Hiroshima
J.A. Kellum, Pittsburgh, Pa.

N.W. Levin, New York, N.Y.
R.L. Mehta, San Diego, Calif.
V. Panichi, Lido di Camaiore
P.M. Palevsky, Pittsburgh, Pa.
Z. Ricci, Rome
M.C. Riella, Parana
P. Stenvinkel, Stockholm

Editorial Board
T. Akiba, Tokyo
R. Amerling, New York, N.Y.
A. Al-Khader, Riyad
W. Arkouche, Lyon
S. Ash, West Lafayette, Ind.
B.J.-M. Canaud, Montpellier
C. Chazot, Tassil
A.K. Cheung, Salt Lake City, Utah
W. Clark, Indianapolis, Ind.

J.T. Daugirdas, Chicago, Ill.
S. Di Giulio, Rome
D. Falkenhagen, Krems
K. Farrington, Stevenage
L. Garred, Thunder Bay, Ont.
N. Gibney, Edmonton, Alta.
T. Goodship, Newcastle upon Tyne
M. Haapio, Helsinki
O. Heimbürger, Stockholm

(Continued on next page)
Disclaimer
The statements, opinions and data contained in this publication are solely those of the individual authors and contributors and not of the publisher and the editor(s). The appearance of advertisements in the journal is not a warranty, endorsement, or approval of the products or services advertised or of their effectiveness, quality or safety. The publisher and the editor(s) disclaim responsibility for any injury to persons or property resulting from any ideas, methods, instructions or products referred to in the content or advertisements.

Drug Dosage
The authors and the publisher have exerted every effort to ensure that drug selection and dosage set forth in this text are in accord with current recommendations and practice at the time of publication. However, in view of ongoing research, changes in government regulations, and the constant flow of information relating to drug therapy and drug reactions, the reader is urged to check the package insert for each drug for any change in indications and dosage and for added warnings and precautions. This is particularly important when the recommended agent is a new and/or infrequently employed drug.

All rights reserved.
No part of this publication may be translated into other languages, reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, recording, microcopying, or by any information storage and retrieval system, without permission in writing from the publisher or, in the case of photocopying, direct payment of a specified fee to the Copyright Clearance Center (see 'General Information').

© Copyright 2012/2013 by S. Karger AG,
P.O. Box, CH–4009 Basel (Switzerland)
Printed in Switzerland
on acid-free and non-aging paper (ISO 9706) by
Reinhardt Druck, Basel
No. 1

Original Papers

3 Advanced Glycation End Products and β2-Microglobulin as Predictors of Carpal Tunnel Syndrome in Hemodialysis Patients
Busch, M.; Schwenzky, A.; Franke, S.; Steim, G.; Wölf, G. (Jena)

10 Implementing On-Line Hemodiafiltration as a Renal Replacement Therapy for ICU Acute Renal Failure: A Single-Center Report of Feasibility, Safety and Hemodynamic Tolerance over a Seven-Year Period

19 Poor Compliance with Guidelines on Anemia Treatment in a Cohort of Chronic Hemodialysis Patients
van der Weerd, N.C. (Amsterdam/Utrecht); Grooteman, M.P.C. (Amsterdam); Blankstein, P.J.; Mazairac, A.H.A. (Utrecht); van den Dorp, M.A. (Rotterdam); den Hoedt, C.H. (Utrecht/Rotterdam); Nanbê, M.J. (Amsterdam); Penne, E.L. (Amsterdam/Utrecht); van der Weel, I. (Utrecht); ter Wee, P.M. (Amsterdam); Bots, M.L. (Utrecht) on behalf of the CONTRAST investigators

28 Phosphate Enrichment of Dialysate for Use in Standard and Extended Haemodialysis

34 Experimental First-Pass Method for Testing and Comparing Sorbent Polymers Used in the Clearance of Iodine Contrast Materials
Angheloiu, G.O. (Pittsburgh, Pa./Dubois, Pa.); Hänscheid, H. (Würzburg); Wen, X. (Pittsburgh, Pa.); Capponi, V. (Moutmouth Junction, N.J.); Anderson, W.D. (Pittsburgh, Pa./Denver, Colo.); Kelium, I.A. (Pittsburgh, Pa.)

40 Peritoneal Dialysis as Compared with Hemodialysis Is Associated with Higher Overhydration but Non-Inferior Blood Pressure Control and Heart Function
Yao, Y.-H. (Yilan); Fu, C.-H.; Ho, S.-J.; Tsai, S.-H.; Ng, Y.-Y.; Chuang, C.-L.; Lin, C.-C.; Chen, J.-Y. (Taipei)

48 Impact of Rapamycin on Peritoneal Fibrosis and Transport Function
Xu, T.; Xie, J.Y.; Wang, W.M.; Ren, H.; Chen, N. (Shanghai)

58 Heart Rate Variability in Peritoneal Dialysis Patients: What Is the Role of Residual Renal Function?
Tang, W. (Beijing); Li, L.-X. (Guangzhou); Pei, J.; Wang, T. (Beijing)

67 Supplementary Ultrafiltration May Improve Inflammation and Cardiac Dysfunction in Patients with High Interdialytic Weight Gain

Letters to the Editor

1 Continuous Ambulatory Peritoneal Dialysis-Related Peritonitis in an Uremic Outpatient: *Achromobacter xylosoxidans*

18 Successful Treatment of Severe Lamotrigine and Clonazepam Poisoning by Blood Purification
Lu, J.; Xiong, C.; Wang, X.; Hu, J.; Chen, X. (Shanghai)

17 Erratum

No. 2

Emerging Trends in Renal Replacement Therapy and Its Application for Acute Kidney Injury
Guest Editor: Mehta, R.L. (San Diego, Calif.)

79 Preface
Mehta, R.L. (San Diego, Calif.)

Advances in Technology

80 Sensors and Hybrid Therapies: A New Approach with Automated Citrate Anticoagulation
Szamosfalvi, B.; Drnak, S.; Yee, J. (Detroit, Mich.)

88 Advances in Continuous Renal Replacement Therapy: Citrate Anticoagulation Update
Tolwani, A.; Wille, K.M. (Birmingham, Ala.)

94 Extracorporeal Carbon Dioxide Removal: The Future of Lung Support Lies in the History
Krusek, M. (Vicenza/Singapore); Wojewodzka-Zelezniakowicz, M. (Vicenza/Bialystok); Cruz, D.N.; Ferrer-Nadal, A.; Teixeira, C.; Iglesias, E.; Kim, J.C. (Vicenza); Brasicz, A. (Pavia); Piccinni, P.; Ronco, C. (Vicenza)

107 Advances in Peritoneal Dialysis in Acute Kidney Injury
Ponne, D.; Balbi, A.L. (São Paulo); Amerling, R. (New York, N.Y.)

117 Cell-Based Strategies for the Treatment of Kidney Dysfunction: A Review

Patient Cohorts

124 Tailored Therapy: Matching the Method to the Patient
Macedo, E. (São Paulo); Mehta, R.L. (San Diego, Calif.)

132 Renal Replacement Therapy in the End-Stage Renal Disease Patient with Critical Illness
Thompson, S.; Pannu, N. (Edmonton, Alta.)

138 Pediatric Renal Replacement Therapy in the Intensive Care Unit
Bridges, B.C. (Nashville, Tenn.); Askenazi, D.J.; Smith, J. (Birmingham, Ala.); Goldstein, S.L. (Cincinnati, Ohio)

Special Situations

149 Ultrafiltration Therapy for Cardiorenal Syndrome: Physiologic Basis and Contemporary Options
Ross, E.A.; Kazory, A. (Gainesville, Fla.)