JOURNAL OF PEDIATRIC ENDOCRINOLOGY AND METABOLISM

EDITOR-IN-CHIEF
Wieland Kiess, Leipzig

ASSOCIATE EDITORS
Abdullah Bereket, Istanbul
Pinchas Cohen, Los Angeles, CA
Feyza Darendeliler, Istanbul
Mehul Dattani, London
Jan Gustafsson, Uppsala
Feihong Luo, Shanghai
Veronica Mericq, Santiago
Christian Roth, Seattle, WA
Jorma Toppari, Turku

ASSISTANT MANAGING EDITOR
Melanie Penke, Leipzig

EDITORIAL BOARD
Tadej Battelino, Ljubljana
Atilla Buyukgebiz, Istanbul
Fernando Cassorla, Santiago de Chile
George Chrousos, Athens
Wayne Cutfield, Auckland
Hugo L. Fideleff, Buenos Aires
Eli Hershkovitz, Beersheba
Olaf Hiort, Lübeck
Stephen LaFranchi, Portland, OR
Roberto Lanes, Caracas
Angelika Mohn, Chieti
Ron Rosenfeld, Portland, OR
Allen W. Root, Saint Petersburg, FL
George Werther, Parkville
Zvi Zadik, Rehovot

DE GRUYTER

ABSTRACTED/INDEXED IN Baidu Scholar, Biological Abstracts, Biological Sciences Journals, BIOSIS Previews, Calcium and Calcified Tissue Abstracts , Celdes, Chemical Abstracts Service (CAS), Chemical Abstracts Service (CAS) - SciFinder, CNKI Scholar (China National Knowledge Infrastructure), CNPIEC, Current Contents/Life Sciences, Discovery Service, EMBASE, Gale/Cengage, Genamics JournalSeek, Google Scholar, ICAP Alcohol Information Databases, Index Copernicus, J-Gate, Journal Citation Reports/Science Edition, JournalTOCs, Medline, Naviga (Softweco), Primo Central (ExLibris), Prous Science Integrity, PubMed, PubsHub, ReadCube, ResearchGate, Science Citation Index, Science Citation Index Expanded, Sciencescape, SCImago (SJR), SCOPUS, Summon (Serials Solutions/ProQuest), TDOne (TDNet), TOC Premier, Ulrich's Periodicals Directory/ulrichsweb, WorldCat (OCLC)

The publisher, together with the authors and editors, has taken great pains to ensure that all information presented in this work (programs, applications, amounts, dosages, etc.) reflects the standard of knowledge at the time of publication. Despite careful manuscript preparation and proof correction, errors can nevertheless occur. Authors, editors and publisher disclaim all responsibility for any errors or omissions or liability for the results obtained from use of the information, or parts thereof, contained in this work.
The citation of registered names, trade names, trademarks, etc. in this work does not imply, even in the absence of a specific statement, that such names are exempt from laws and regulations protecting trademarks etc. and therefore free for general use.

ISSN 0334-018X · e-ISSN 2191-0251

All information regarding notes for contributors, subscriptions, Open access, back volumes and orders is available online at www.degruyter.com/jpem.

RESPONSIBLE EDITOR(S)
Prof. Dr. Wieland Kiess, MD, Professor of Pediatrics, Director and Chair, Hospital for Children and Adolescents, Department of Women and Child Health, University Hospitals, University of Leipzig, Liebigstraße 20a, 04103 Leipzig, Germany, Tel.: +49 (0)341 972 60 00,
Fax: +49 (0)341 972 60 09, e-mail: Wieland.Kiess@medizin.uni-leipzig.de

JOURNAL MANAGER Heike Jahnke, De Gruyter, Genthiner Straße 13, 10785 Berlin, Germany,
Tel.: +49 (0)30 260 05 – 220, Fax: +49 (0)30 260 05 – 246, e-mail: jpem.editorial@degruyter.com

RESPONSIBLE FOR ADVERTISEMENTS Claudia Neumann, Genthiner Straße 13, 10785 Berlin, Germany, Tel.: +49 (0)30 260 05 – 226,
Fax: +49 (0)30 260 05 – 264, e-mail: anzeigen@degruyter.com

© 2016 Walter de Gruyter GmbH, Berlin/Boston

TYPESETTING Compuscript Ltd., Shannon, Ireland

PRINTING Franz X. Stückle Druck und Verlag e.K., Ettenheim
Printed in Germany

Cover Illustration: medicalpicture/Friedhelm Achenbach

Contents

Highlight: Vitamin D in Health and Disease

Wieland Kiess, Yoon Ju Bae, Melanie Penke, Mandy Geserick and Jürgen Kratzsch
Vitamin D in health and disease: the global threat of vitamin D deficient rickets —— 391

Atindra Mishra, Devi Dayal, Naresh Sachdeva and Savita Verma Attri
Effect of 6-months' vitamin D supplementation on residual beta cell function in children with type 1 diabetes: a case control interventional study —— 395

Ozgur Pirgon, Gonca Sandal, Hasan Cetin and Bumin Dundar
Low serum sclerostin levels in newborns with vitamin D deficiency —— 401

Linda Aurpibul, Sirintip Sricharoenchai, Orasri Wittawatmongkol, Virat Sirisanthana, Wanatpreeya Phongsamart, Tavitiya Sudjaritruk and Kulkanya Chokephaibulkit
Vitamin D status in perinatally HIV-infected Thai children receiving antiretroviral therapy —— 407

Mohammad Shafi Kuchay, Ganesh Sudhakar Jevalikar, Ambrish Mithal, Sunil Kumar Mishra and Navin Dang
Efficacy and safety of a single monthly dose of cholecalciferol in healthy school children —— 413

Ramune Jacobsen, Peder Frederiksen and Berit L. Heitmann
Exposure to sunshine early in life prevented development of type 1 diabetes in Danish boys —— 417

Devi Dayal
It's high time to revise Indian guidelines on vitamin D supplementation in children —— 425

Review

James Moyer, Laura Jacks, Janel Darcy Hunter and Gilbert Chan
Slipped capital femoral epiphysis and associated hypothyroidism. A review of the literature with two classic case examples —— 427

Original Articles

Ayça Altıncık, Birsen Tuğlu, Korcan Demir, Gönül Çatlı, Ayhan Abacı and Ece Böber
Relationship between oxidative stress and blood glucose fluctuations evaluated with daily glucose monitoring in children with type 1 diabetes mellitus —— 435

Mackenzie J. Bodo, Elizabeth Yakes Jimenez, Carole Conn, Alyssa Dye, Page Pomo, Deborah Kolkmeyer, Robert Orlando and Alberta S. Kong
Association between circulating CCL2 levels and modifiable behaviors in overweight and obese adolescents: a cross-sectional pilot study —— 441

Michelle Battista Hesse, Gregory Young and Robert D. Murray
Evaluating health risk using a continuous metabolic syndrome score in obese children —— 451

Bo Hyun Park, Sun Jung Baik, Hye Ah Lee, Young Sun Hong, Hae Soon Kim and Hyesook Park
The association of thyroid hormones and blood pressure in euthyroid preadolescents —— 459

Susanne E. Stalman, Ilse Hellinga, Jan M. Wit, Raoul C.M. Hennekam, Gerdine A. Kamp and Frans B. Plötz
Growth failure in adolescents: etiology, the role of pubertal timing and most useful criteria for diagnostic workup —— 465

Jamil Miguel-Neto, Annelise B. Carvalho, Antonia Paula Marques-de-Faria, Gil Guerra-Júnior and Andréa T. Maciel-Guerra
New approach to phenotypic variability and karyotype-phenotype correlation in Turner syndrome —— 475

Mehmet Gündüz, Özlem Ünal, Sumru Kavurt, Emrecan Türk and Neslihan Önenli Mungan
Clinical findings and effect of sodium hydrogen carbonate in patients with glutathione synthetase deficiency —— 481

Sebahat Yılmaz Ağladıoğlu, Zehra Aycan, Semra Çetinkaya, Veysel Nijat Baş, Aşan Önder, Havva Nur Peltek Kendirci, Haldun Doğan and Serdar Ceylaner
Maturity onset diabetes of youth (MODY) in Turkish children: sequence analysis of 11 causative genes by next generation sequencing —— 487

Case Reports

Chiara Maggioli, Paola Cambiaso, Sara Ciccone, Giovanna Stefania Colafati and Marco Cappa
Long-term first line medical treatment in a 4-year-old girl with Xq26.3 microduplication-negative somatotropinoma. Case report and literature review —— 497

Emily Breidbart, Tamara Cameo, James H. Garvin Jr., Hanina Hibshoosh and Sharon E. Oberfield
Pubertal outcome in a female with virilizing adrenocortical carcinoma —— 503