

JOURNAL OF PEDIATRICS
VOL. 137, NO.3; SEPTEMBER 2000

EDITORIALS	
Combination vaccines: Problems and promise Michael D. Decker, MD, MPH, Kathryn M. Edwards, MD Nashville, Tennessee	291
Can Haemophilus influenzae type b disease be eliminated from the United States? Mathuram Santosham, MD, MPH Baltimore, Maryland	295
Gastroesophageal reflux and infant apnea Raouf S. Amin, MD Cincinnati, Ohio	298
Botulinum toxin A in cerebral palsy: Functional outcomes H. Kerr Graham, MD, FRACS(Ed), FRACS Parkville, Victoria, Australia	300
ORIGINAL ARTICLES	
Primary vaccination of infants with diphtheria-tetanus-acellular pertussis-hepatitis B virus-inactivated polio virus and Haemophilus influenzae type b vaccines given as either separate or mixed injections Heinz J. Schmitt, MD, Marcus Knuf, MD, Esteban Oritz, MD, Roland Sanger, MD, Marie Chantal Uwamwezi, MSc, Achim Kaufhold, MD Kiel, Germany, and Rixensart, Belgium	304
Experience with the prevention of invasive Haemophilus influenzae type b disease by vaccination in Alaska: The impact of persistent oropharyngeal carriage Rosalyn Singleton, MD, MPH, Lisa R. Bulkow, MS, Orin S. Levine, PhD, Jay C. Butler, MD, Thomas W. Hennessy, MD, MPH, Alan Parkinson, PhD Anchorage, Alaska, and Bethesda, Maryland	313
The relationship between gastroesophageal reflux and apnea in infants Nira Arad-Cohen, MD, Ayala Cohen, PhD, Emanuel Tirosh, MD Haifa, Israel	321
Mydriatics slow gastric emptying in preterm infants Savithri Bonthala, MD, John W. Sparks, MD, Kathryn H. Musgrove, MD, Carol Lynn Berseth, MD Houston, Texas	327
An evaluation of botulinum-A toxin injections to improve upper extremity function in children with hemiplegic cerebral palsy Darcy Fehlings, MD, MSC, Mercer Rang, MB, BS, Janet Glazier, BSc(OT), Catherine Steele, PhD Toronto, Ontario, Canada	331
Isolation and identification of the group B streptococcal toxin CM101 from infants with sepsis Hakan W. Sundell, MD, Heping Yan, MD, Clint E. Carter, PhD, Barbara	338

D. Wamil, MD, Kanning Wu, MS, Rao Gaddipati, MS, Dongbei Li, MS, Carl G. Hellerqvist, PhD Nashville, Tennessee	
Premature infants respond to early-onset and late-onset sepsis with leukocyte activation Nancy P. Weinschenk, MD, Antonio Farina, MD, Diana W. Bianchi, MD	345
Cerebral infarction in the term newborn: Clinical presentation and long-term outcome Con Sreenan, MB, MRCPI, Ravi Bhargava, MD, FRCPC, Charlene T. Robertson, MD, FRCPC Edmonton, Alberta, Canada	351
Transglutaminase antibodies in children with a genetic risk for celiac disease Edward J. Hoffenberg, MD, Fei Bao, MD, George S. Eisenbarth, MD, PhD, Cynthia Uhlhorn, Joel E. Haas, MD, Ronald J. Sokol, MD, Marian Rewers, MD, PhD, MPH Denver, Colorado	356
A trial of oats in children with newly diagnosed celiac disease Edward J. Hoffenberg, MD, Joel Haas, MD, Amy Drescher, RD, Rebecca Barnhurst, RD, Iris Osberg, MT, Fei Bao, MD, George Eisenbarth, MD, PhD Denver, Colorado	361
Case-control study of factors associated with nutritional rickets in Nigerian children Tom D. Thacher, MD, Philip R. Fischer, MD, John M. Pettifor, MB, BCh, PhD, Juliana O. Lawson, BM, BCh, Christian O. Isichei, BM, BCh, MS, Gary M. Chan, MD Jos, Nigeria, Rochester, Minnesota, Johannesburg, South Africa, and Salt Lake City, Utah	367
Longitudinal relationship among growth, nutritional status, and pulmonary function in children with cystic fibrosis: Analysis of the Cystic Fibrosis Foundation National CF Patient Registry Babette S. Zemel, PhD, Abbas F. Jawad, PhD, Stacey FitzSimmons, PhD, Virginia A. Stallings, MD Philadelphia, Pennsylvania, and Washington, DC	374
Energy expenditure after surgical repair in children with cyanotic congenital heart disease Catherine A. Leitch, PhD, Cheryl A. Karn, RNC, Gregory J. Ensing, MD, Scott C. Denne, MD Indianapolis, Indiana	381
Homocysteine levels during fasting and after methionine loading in adolescents with diabetic retinopathy and nephropathy Francesco Chiarelli, MD, Mariapina Pomilio, MD, Angelika Mohn, MD, Stefano Tumini, MD, Maurizio Vanelli, MD, Guido Morgese, MD, Anna	386

Spagnoli, MD, Alberto Verrotti, MD, PhD Chieti, Parma, and Siena, Italy, and Portland, Oregon	
Auditory brainstem response findings in Rett syndrome: Stability over time Joseph P. Pillion, PhD, Sakkubai Naidu, MD Baltimore, Maryland	393
Osteogenesis imperfecta in childhood: Prognosis for walking Raoul H. Engelbert, PCS, PhD, Cuno S. P. M. Uiterwaal, MD, PhD, Vincent A. M. Gulmans, PCS, PhD, Hans Pruijs, MD, PhD, Paul J. M. Helders, PSC, MSc, PhD Utrecht, The Netherlands	397
Intravenous pamidronate treatment of polyostotic fibrous dysplasia associated with the McCune Albright syndrome Margaret Zacharin, MBBS, FRACP, Mark O'Sullivan, MBBS, FRACS Parkville, Victoria, Australia	403
Osteoporosis pseudoglioma syndrome: Treatment of spinal osteoporosis with intravenous bisphosphonates Margaret Zacharin, FRACP, Tim Cundy, MD Victoria, Australia, and Auckland, and New Zealand	410
GRAND ROUNDS	
The pages devoted to the Grand Rounds section are supported by a nonrestricted educational grant from Mead-Johnson Nutritionals. The pneumococcal protein conjugate vaccines Timothy R. Peters, MD, Kathryn M. Edwards, MD Nashville, Tennessee	416
CLINICAL AND LABORATORY OBSERVATIONS TOP	
Increased oxidative stress in kwashiorkor Mark J. Manary, MD, Christiaan Leeuwenburgh, PhD, Jay W. Heinecke, MD St Louis, Missouri	421
Partial oculomotor nerve palsy associated with elevated anti-galactocerebroside and anti-GM1 antibodies Tohshin Go, MD, PhD Otsu, Japan	425
Acute neurologic decompensation in an infant with cobalamin deficiency exposed to nitrous oxide Kate Felmet, MD, Berkleee Robins, MD, David Tilford, MD, Susan J. Hayflick, MD Portland, Oregon	427
Detection of infant's heart beat/pulse by caregivers: A comparison of 4 methods Margaret Tanner, RN, Mid, Sue Nagy, PhD, Jennifer K. Peat, PhD Parramatta, New South Wales, and Sydney, Australia	429
ADVANCES IN PEDIATRICS	
Major advances in pediatric cardiology in the 20th century: I.	431

<p>Diagnostics Howard P. Gutgesell, MD, Jennifer H. Lindsey, MD Charlottesville, Virginia</p>	
CURRENT LITERATURE AND CLINICAL ISSUES	
Abstracts from the literature	434
LETTERS	
<p>Correlates of lipoprotein(a) levels in a biracial cohort of young girls D. N. Kiortsis, MD, M. S. Elisaf, MD Ioannina, Greece</p>	438
<p>Hyper-IgD syndrome and familial Hibernian fever are true periodic fever syndromes J. P. H. Drenth, MD, PhD, R. J. Powell, MD, PhD Nijmegen, The Netherlands, and Nottingham, United Kingdom</p>	438
<p>Reply Alexander R. Lawton, MD, Kathryn M. Edwards, MD, K. Tyson Thomas, BA Nashville, Tennessee</p>	439
<p>Reply Shai Padeh, MD, Naphtali Brezniak, MD, DMD, MSD, Debora Zemer, MD, Elon Pras, MD, Avi Livneh, MD, Pnina Langevitz, MD, Amyel Migdal, MD, Mordechai Pras, MD, Justen H. Passwell, MD Tel Hashomer, Israel</p>	439
<p>Idiopathic copper toxicosis Hassib Narchi, MD Lyndon, West Bromwich, United Kingdom</p>	440
<p>Reply Thomas Müller, MD, Wilfried Müller, MD Innsbruck and Reutte, Austria</p>	440
<p>Iron deficiency in children with lead exposure Peter Waldron, MD Charlottesville, Virginia</p>	441
<p>Reply Janet R. Serwint, MD Baltimore, Maryland</p>	441
<p>On mice and men: An autosomal recessive syndrome of chronic recurrent multifocal osteomyelitis and congenital dyserythropoietic anemia H. A. Majeed, FRCPI, DCh, H. El-Shanti, MD, H. Al-Rimawi, FRCP, DCh, N. Al-Masri, MD Amman, Jordan</p>	441
READERS SERVICES	
Instructions to authors	10A
Information for readers	15A
Scheduled meetings	19A

News and notes	20A
Application form:Fellowship listing	23A
Professional opportunities	34A
VOL. 137. NO.4; OCTOBER 2000	
EDITORIALS	
Turner's syndrome: A growing concern Ron G. Rosenfeld, MD Portland, Oregon	443
Pieces of the puzzle: Diabetes and the structure and function of the heart and blood vessels Lawrence M. Dolan, MD, Stephen R. Daniels, MD, PhD Cincinnati, Ohio	445
Atopy, autoimmunity, and the TH1/TH2 balance Sampath Prahalad, MD Cincinnati, Ohio	446
MEDICAL PROGRESS	
Effect of inhaled corticosteroids on the hypothalamic-pituitary-adrenal axis and growth in children Lenore S. Levine, MD, Bruce A. Boston, MD New York, New York, and Portland, Oregon	450
ORIGINAL ARTICLES	
Delayed diagnoses of Turner's syndrome: Proposed guidelines for Change Lars Säwendahl, MD, PhD, Marsha L. Davenport, MD Stockholm, Sweden, and Chapel Hill, North Carolina	455
Longitudinal analysis of growth over the first 3 years of life in Turner's syndrome Lea Even, MD, Ayala Cohen, DSC, Naama Marbach, MSc, Manuela Brand, MD, Rivka Kauli, MD, Wolfgang Sippell, MD, Ze'ev Hochberg, MD, DSC Haifa and Petah-Tivka, Israel, and Kiel, Germany	460
Carotid artery distensibility and cardiac function in adolescents with type 1 diabetes Amish Parikh, MD, Etienne B. Sochett, MB, BS, FRCPC, Brian W. McCrindle, MD, MPH, FRCPC, Anne Dipchand, MD, FRCPC, Alan Daneman, MB, Bch, FRCPC, Denis Daneman, MB, Bch, FRCPC Toronto, Ontario, Canada	465
Decreased prevalence of atopic diseases in children with diabetes The EURODIAB Substudy 2 Study Group Pécs, Hungary	470
The association of atopic dermatitis in infancy with immunoglobulin E food sensitization David J. Hill, FRACP, Richard Sporik, DM, MRCP, John Thorburn, FRACP, Clifford S. Hosking, MD, FRACP Melbourne, Victoria, Australia	475

Allergic gastroenteropathy in preterm infants Marita A. D'Netto, MBBS, MRCP, Victor C. Herson, MD, Naveed Hussain, MBBS, Andrew Ricci, Jr, MD, R. T. Brown, MD, Jeffrey S. Hyams, MD, Christopher J. Justinich, MD Hartford and Farmington, Connecticut	480
Deficiency of humoral immunity in cartilage-hair hypoplasia Outi Mäkitie, MD, Ilkka Kaitila, MD, Erkki Savilahti, MD Helsinki, Finland	487
White coat hypertension in children with elevated casual blood pressure Jonathan M. Sorof, MD, Ronald J. Portman, MD Houston, Texas	493
Discontinuation of enterostomy tube feeding by behavioral treatment in early childhood: A randomized controlled trial Diane Benoit, MD, FRCPC, Elaine E. L. Wang, MD, FRCPC, Stanley H. Zlotkin, MD, PhD, FRCPC Toronto, Ontario, Canada	498
Effects of long-chain polyunsaturated fatty acid supplementation on fatty acid status and visual function in treated children with hyperphenylalaninemia Carlo Agostoni, MD, Nicoletta Massetto, MD, Giacomo Biasucci, MD, Amilcare Rottoli, MD, Milena Bonvissuto, MD, MariaGrazia Bruzzese, PhD, Marcello Giovannini, MD, Enrica Riva, MD Milan, Italy	504
Short stature in competitive prepubertal and early pubertal male gymnasts: The result of selection bias or intense training? Robin M. Daly, PhD, Peter A. Rich, PhD, Rudi Klein, PhD, Shona L. Bass, PhD Melbourne, Australia	510
Bronchoalveolar lavage cellular composition in acute asthma and acute bronchiolitis Chang Keun Kim, MD, Churl Young Chung, MD, Soo Jeon Choi, MD, Do Kyun Kim, MD, Yang Park, MD, Young Yull Koh, MD Seoul, Korea	517
Feeding efficiency and respiratory integration in infants with acute viral bronchiolitis Lorraine L. Pinnington, DipCOT, BA, MSc, PhD, CPsychol, Craig M. Smith, MRCP(UK), MRCPCH, Richard E. Ellis, MPhil, Richard E. Morton, BA, BMBCh, FRCP Derby and Exeter, United Kingdom	523
The interaction of prematurity with genetic and environmental influences on cognitive development in twins Gesina Koeppen-Schomerus, BSc, Thalia C. Eley, PhD, Dieter Wolke, PhD, Paul Gringras, MRCPCH, Robert Plomin, PhD	527

London and Hatfield, Hertfordshire, United Kingdom	
Health status development in a cohort of preterm children Nicolet C. M. Theunissen, PhD, A. Lyaden-Ouden, MD, PhD, Jacqueline J. Meulman, PhD, Hendrik M. Koopman, PhD, S. Pauline Verloove-Vanhorick, MD, PhD, Jan-Maarten Wit, MD, PhD Leiden, The Netherlands	534
Unbound bilirubin associated with kernicterus: A historical approach Charles E. Ahlfors, MD San Francisco, California	540
The role of swallowing during active sleep in the clearance of reflux in term and preterm infants Heather E. Jeffery, FRACP, MRCP, MPH, PhD, Danielle Ius, BSc, Megan Page, BSc, PhD Camperdown, New South Wales and Sydney, Australia	545
Lead exposure from blood transfusion to premature infants Cynthia F. Bearer, MD, PhD, Mary Ann O'Riordan, MS, Richard Powers, MD Cleveland, Ohio, and Oakland, California	549
Lead exposure and motor functioning in 4 ½-year-old children: The Yugoslavia Prospective Study Gail A. Wasserman, PhD, Aida Musabegovic, PhD, Xinhua Liu, PhD, Jennie Kline, PhD, Pam Factor-Litvak, PhD, Joseph H. Graziano, MD New York, New York	555
GRAND ROUNDS	
The pages devoted to the Grand Rounds section are supported by a nonrestricted educational grant from Mead-Johnson Nutritionals. Purpura fulminans caused by group A -hemolytic Streptococcus sepsis Kavita Dhodapkar, MD, Selim Corbacioglu, MD, Mary Wu Chang, MD, Margaret Karpatkin, MD, Donna DiMichele, MD	562
CLINICAL AND LABORATORY OBSERVATIONS	
Symptomatic lead poisoning in infancy: A prospective case analysis Kim N. Dietrich, PhD, Omer G. Berger, MD, Amit Bhattacharya, PhD Cincinnati, Ohio	568
Living-related liver transplantation for neonatal-onset propionic acidemia Tohru Yorifuji, MD, Junko Muroi, MD, Ayumi Uematsu, MD, Tatsutoshi Nakahata, MD, Hiroto Egawa, MD, Koichi Tanaka, MD Kyoto, Japan	572
Resolution of hypoxemia in a liver transplant recipient after ligation of a portosystemic shunt L. Terry Spencer, MD, Max R. Langham, MD, Mark H. Hoyer, MD, David A. Jones, MD, James G. Caridi, MD, Sarah E. Chesrown, MD, PhD Gainesville and Tallahassee, Florida	575

Psoriatic eruption in Kawasaki disease B. Anne Eberhard, MBBS, MSc, FRACP, FRCP(C), Robert P. Sundel, MD, Jane W. Newburger, MD, MSc, Annette Baker, RN, PNP, Robert C. Fuhlbrigge, MD, PhD, Jane C. Burns, MD, Stephen E. Gellis, MD Boston, Massachusetts, and La Jolla, California	578
Scleral melanocytosis and oculodermal melanocytosis (nevus of Ota) in Chinese children Alexander K. C. Leung, MBBS, FRCPC, FRCP(UK & IREL), FRCPCH, C. Pion Kao, MD, FRCPC, Helen Y. H. Cho, MD, May P. M. Siu, MD, Matthew C. K. Choi, MD, Reginald S. Sauve, MD, FRCPC Calgary, Alberta, Canada	581
Hyperfunctioning malignant thyroid nodule in an 11-year-old girl: Pathologic and molecular studies Hortensia Mircescu, MD, Jasmine Parma, PhD, Céline Huot, MD, MSc, Cheri Deal, MD, PhD, Luc L. Oligny, MD, MSc, Gilbert Vassart, MD, PhD, Guy Van Vliet, MD Montreal, Quebec, Canada, and Brussels, Belgium	585
INSIGHTS	
Delivery in breech presentation—a cause of hemorrhoids in a newborn Oleg Kleiner, MD, Zahavi Cohen, MD, Arkady Akkerman, MD, Abraham J. Mares, MD Ben-Gurion and Beer Sheva, Israel	588
LETTERS	
Acute chest syndrome of sickle cell disease Nilesh Mehta, MD, MRCPCH, DCH, Iain MacIntosh, MBChB, MRCP, DCH, Rodney Rivers, FRCP, Simon Nadel, MRCP London, United Kingdom	589
Brian W. Berman, MD, Daniel Craven, MD Cleveland, Ohio	589
Reply Charles T. Quinn, MD, George R. Buchanan, MD Dallas, Texas	590
Interpreting risks of steroids for preterm infants Reese H. Clark, MD, Joyce L. Peabody, MD Fort Lauderdale, Florida	590
Reply Arthur E. Kopelman, MD, Donald Holbert, PhD, Alicia A. Moise, MD Greenville, North Carolina, and Houston, Texas	591
CORRECTION	
T-cell–depleted bone marrow transplantation from allogeneic sibling for X-linked hyper-immunoglobulin M syndrome (Gennery AR, Clark JE, Flood TJ, Abinun M, Cant AJ. J Pediatr 2000;137:290)	592
READERS SERVICES	
Instructions to authors	19A

Information for readers	22A
Scheduled meetings	27A
News and notes	28A
Professional opportunities	37A
VOL. 137 NO. 4; SUPPLEMENT OCTOBER 2000	
Preface	S1
Executive summary	S3
Guidelines	S8
I. Introduction	S8
II. Follow-up	S10
Mission of Newborn Screening Programs	S10
Responsibility of. the Follow-up Component of the Newborn Screening System	S10
Components of the Newborn Screening Follow-up Program	S10
Follow-up and Reporting of Newborn Screening Test Results	S11
Communication	S12
Documentation	S13
Newborn Screening Follow-up Checklist	S13
III. Diagnosis	S14
Diagnostic Confirmation	S14
Staffing	S14
Laboratory Testing and Qualitt Control	S14
Proficiency Testing	S14
Interpretation	S14
Sickle Cell Disease and Other Hemogtobinopathies	S14
Endocrinopathies	S17
Metabolic Diseases	S20
IV. Management	S27
Sickle Cell Disease and Other Hemoglobinoputhies	S27
Endocrinopathies	S30
Metabolic Diseases	S32
V.Evaluation	S41
Evaluation of the Overall System	S41
Evaluation of Newborn Screening Laboratories	S41
Evaluation of Diagnostic Laboratories	S42
Further Reading	S43
Appendix. Guidelines for Follow-up of Carriers of Hemoglobin Variants Detected by Newborn Screening	S45