## Contents

**April 2014 / Volume 59 / Number 4**

### Editor’s Commentary

Commentary on the April 2014 Issue

### Editor’s Choice

**Nebulization During Spontaneous Breathing, CPAP, and Bi-Level Positive-Pressure Ventilation: A Randomized Analysis of Pulmonary Radioaerosol Deposition**  
by Juçara Gasparetto Maccari, Cassiano Teixeira, Augusto Savi, Roselaine Pinheiro de Oliveira, André Sant’Ana Machado, Tulio Frederico Tometto, Eduardo Ludvig, Paulo José Zimmermann Teixeira, and Marli Maria Knorst—Porto Alegre, Brazil

### Original Research

**High-Flow Nasal Cannula versus Conventional Oxygen Therapy After Endotracheal Extubation: A Randomized Crossover Physiologic Study**  
by Nattapol Rittayamai, Jamsak Tscheikunna—Bangkok, Thailand and Pitchayapa Rujiwitz—Pathum Thani, Thailand

**The Correlation Between Esophageal and Abdominal Pressures in Mechanically Ventilated Patients Undergoing Laparoscopic Surgery**  
by Anees Sindi—Jeddah, Saudi Arabia

**Mild Intermittent Asthma**  
by Ming Cheng, Zhi-yong Pan, Jiong Yang, and Ya-dong Gao—Wuhan, China

**Pulmonary Function of Patients With Chronic Neck Pain: A Spirometry Study**  
by Zacharias Dimitriadis, Eleni Kapreli, Nikolaos Strimpakos—Lamia, Greece

**Long-Term Acute Care Patients Weaning From Prolonged Mechanical Ventilation Maintain Circadian Rhythm**  
by Dafna Koldobskiy, Montserrat Diaz-Abad, Steven M Scharf, John Brown, Núria Millán García del Real, and Martí Pons-Odena—Barcelona, Spain

**Reference Equation for the 2-Minute Walk Test in Adults and the Elderly**  
by Juçara Gasparetto Maccari, Cassiano Teixeira, Augusto Savi, Roselaine Pinheiro de Oliveira, André Sant’Ana Machado, Tulio Frederico Tometto, Eduardo Ludvig, Paulo José Zimmermann Teixeira, and Marli Maria Knorst—Porto Alegre, Brazil

**Is a Nasopharyngeal Tube Effective as Interface to Provide Bi-Level Noninvasive Ventilation?**  
by Enetris, Velasco Arnaz, Francisco José Cambra Lasaosa, Lluisa Hernández Platero, Núria Millán García del Real, and Martí Pons-Odena—Barcelona, Spain

**Effect of Oral Hygiene and 0.12% Chlorhexidine Gluconate Oral Rinse in Preventing Ventilator-Associated Pneumonia After Cardiovascular Surgery**  
by Liliana Noemí Nicolosi, Maria del Carmen Rubio, Carlos Daniel Martinez, Nidia Noemí González, and Marisa Edith Cruz—Buenos Aires, Argentina

**Lung Volume Changes During Cleaning of Closed Endotracheal Suction Catheters: A Randomized Crossover Study Using Electrical Impedance Tomography**  
by Amanda Corley, Nicola Sharpe, Lawrence R Caruana, Amy J Spooner, and John F Fraser—Brisbane, Queensland, Australia

**Ventilator-Associated Pneumonia After Cardiovascular Surgery**  
by Eneritz Velasco Arnaiz, Francisco José Cambra Lasaosa, Lluïsa Hernández Platero, Núria Millán García del Real, and Martí Pons-Odena—Barcelona, Spain

**Nebulization During Spontaneous Breathing, CPAP, and Bi-Level Positive-Pressure Ventilation: A Randomized Analysis of Pulmonary Radioaerosol Deposition**  
by Juçara Gasparetto Maccari, Cassiano Teixeira, Augusto Savi, Roselaine Pinheiro de Oliveira, André Sant’Ana Machado, Tulio Frederico Tometto, Eduardo Ludvig, Paulo José Zimmermann Teixeira, and Marli Maria Knorst—Porto Alegre, Brazil

**Ventilation: A Randomized Analysis of Pulmonary Radioaerosol Deposition Nebulization During Spontaneous Breathing, CPAP, and Bi-Level Positive-Pressure Ventilation: A Randomized Analysis of Pulmonary Radioaerosol Deposition**  
by Juçara Gasparetto Maccari, Cassiano Teixeira, Augusto Savi, Roselaine Pinheiro de Oliveira, André Sant’Ana Machado, Tulio Frederico Tometto, Eduardo Ludvig, Paulo José Zimmermann Teixeira, and Marli Maria Knorst—Porto Alegre, Brazil

**Extubation: A Randomized Crossover Physiologic Study**  
by Tom Piraino, Waleed Alhazzani, Marcel Tunks—Hamilton, Ontario, Canada

**Ventilation?**  
by Liliana Noemí Nicolosi, Maria del Carmen Rubio, Carlos Daniel Martinez, Nidia Noemí González, and Marisa Edith Cruz—Buenos Aires, Argentina

**Lung Volume Changes During Cleaning of Closed Endotracheal Suction Catheters: A Randomized Crossover Study Using Electrical Impedance Tomography**  
by Amanda Corley, Nicola Sharpe, Lawrence R Caruana, Amy J Spooner, and John F Fraser—Brisbane, Queensland, Australia

**Reference Equation for the 2-Minute Walk Test in Adults and the Elderly**  
by Juçara Gasparetto Maccari, Cassiano Teixeira, Augusto Savi, Roselaine Pinheiro de Oliveira, André Sant’Ana Machado, Tulio Frederico Tometto, Eduardo Ludvig, Paulo José Zimmermann Teixeira, and Marli Maria Knorst—Porto Alegre, Brazil

**Measuring Gait Speed in the Out-Patient Clinic: Methodology and Feasibility**  
by Craig Karpman, Nathan K LeBraessuer, Zachary S DePew, Paul J Novotny, and Robert P Benzo—Rochester, Minnesota

**Reproductibility of Cadence-Free 6-Minute Step Test in Subjects with COPD**  
by Joyce NF da Costa, Juliano F Arcuri, Ivana L Gonçalves, Simone F Davi—São Paulo, Brazil

**Pulmonary Function of Patients With Chronic Neck Pain: A Spirometry Study**  
by Zacharias Dimitriadis, Eleni Kapreli, Nikolaos Strimpakos—Lamia, Greece and Jacqueline Oldham—Manchester, United Kingdom

**Evaluation of Airway Wall Thickness Via High-Resolution Computed Tomography in Mild Intermittent Asthma**  
by Selvi Asker, Muntecep Asker—Van, Turkey

**Corticosteroid Therapy for Severe Community-Acquired Pneumonia: A Meta-Analysis**  
by Ming Cheng, Zhi-yong Pan, Jiong Yang, and Ya-dong Gao—Wuhan, China
Predictive Values of Semi-Quantitative Procalcitonin Test and Common Biomarkers for the Clinical Outcomes of Community-Acquired Pneumonia
by Motoi Ugajin, Kenichi Yamaki, Natsuko Hirasawa, and Takeo Yagi—Ichinomiya City, Aichi, Japan 564

C-Reactive Protein, Procalcitonin, Clinical Pulmonary Infection Score, and Pneumonia Severity Scores in Nursing Home Acquired Pneumonia
by Ilias Porfyridis, Georgios Georgiadis, Paris Vogazianos, Georgios Mitas, and Andreas Georgiou—Nicosia, Cyprus 574

Bronchoscopic and Nonbronchoscopic Methods of Airway Culturing in Tracheostomized Children
by Olofunke Afolabi-Brown, Michael Marcus, Peter Speciale, Murali Pagala, and Mikhail Kazachkov—Brooklyn, New York 582

Reviews

Pulmonary Rehabilitation for Mild COPD: A Systematic Review
by Cristina Jácome and Alda Marques—Porto, Portugal 588

Respiratory Care Year in Review 2013: Airway Management, Noninvasive Monitoring, and Invasive Mechanical Ventilation
by Charles G Darbin Jr—Charlottesville, Virginia Luis Blanch—Madrid, Spain
Eddy Fan—Toronto, Ontario, Canada
and Dean R Hess—Boston, Massachusetts 595

Editorials

Looking Around to Look Forward
by Camilo Corbellini—Milan, Italy 607

High-Flow Nasal Oxygen Therapy: One More Chance for Extubation?
by Raffaele Scala—Arezzo, Italy 609

Published Online (www.rcjournal.com)

Management of the First Confirmed Case of Avian Influenza A H7N9
by Jian-ge Qiao, Lu Zhang, Ya-hui Tong, Wei Xie, Jin-dong Shi MM, and Qing-min Yang—Shanghai, China e43

Unilateral Primary Lung Hypoplasia Diagnosed in Adulthood
by Stamatis Katsenos, Elvira-Markela Antonogiannaki, and Konstantinos Tsitiri—Athens, Greece e47

Adult Diagnosis of Swyer-James-Macleod Syndrome: Retrospective Analysis of Four Cases
by Hadice Selimoglu Sen, Mahsum Taylan, Ozlem Abakay, Cengizhan Sezgi, and Mehmet Gazi Cetincukmak—Diyarbakir, Turkey e51

Teaching Case

Pleuro-Pulmonary Complications of Rheumatoid Arthritis
by John P Corcoran—Oxford, United Kingdom
Mehreen Ahmad, Rahul Makherjee—Milton Keynes, United Kingdom
and Karen C Redmond—Dublin, Ireland e55

Correspondence

Noninvasive Ventilation for Acute Hypercapnic Respiratory Failure: Is It the Same as in Hypercapnic Coma?
by Killen H Briones Claudett—Guayaquil, Ecuador
author reply by Arnaud W Thille, Damien Contou, and Ana Córdoba-Izquierdo—Créteil, France e60

Simulation Studies for Device Evaluation
by Robert L Chatburn—Cleveland, Ohio
author reply by Salah Boussen, Pierre Michelet, and Marc Gainnier—Marseille, France e62

Near-Infrared Spectroscopy With Vascular Occlusion Technique Identifies Peripheral Microcirculation Abnormalities and Hyperoxia Adverse Effects in Pulmonary Arterial Hypertension
by Sébastien Champion—Paris, France
author reply by Stavros Dimopoulos and Serafin Nanas—Athens, Greece e70