INVITED EDITORIAL

Sodium Bicarbonate Revisited
Jeffrey R. Acsell

REVIEW ARTICLES

Management and Monitoring of Anticoagulation for Children Undergoing Cardiopulmonary Bypass in Cardiac Surgery
Colleen E. Gruenwald, Cedric Manlhiot,
Lynn Crawford-Lean, Celeste Foreman,
Leonardo R. Brandão, Brian W. McClurndle,
Helen Holtby, Ross Richards, Helen Moriarty,
Glen Van Arsdell, Anthony K. Chan

Application of Autologous Derived-Platelet Rich Plasma Gel in the Treatment of Chronic Wound Ulcer: Diabetic Foot Ulcer
Akinfemi Ayobami Akingboye, Stephen Giddins,
Philip Gamston, Arthur Tucker, Harshad Navsaria,
Constantions Kyriakides

ORIGINAL ARTICLES

Evaluation of Hemodynamic and Regional Tissue Perfusion Effects of Minimized Extracorporeal Circulation (MECC®)
Adrian Bauer, Claudius Diez, Jens Schubel, Nagi El-Shouki,
Dietrich Metz, T. Eberle, Harald Hausmann

Microemboli from Cardiopulmonary Bypass are Associated with a Serum Marker of Brain Injury
Robert C. Groom, Reed D. Quinn, Paul Lennon,
Janine Welch, Robert S. Kramer, Cathy S. Ross,
Peter A. Beaulieu, Jeremiah R. Brown, David J. Malenka,
Gerald T. O’Connor, Donald S. Likosky for the Northern New England Cardiovascular Disease Study Group

The Perfusionist’s Role in a Collaborative Multidisciplinary Approach to Blood Transfusion Reduction in Cardiac Surgery
Edy S. Zelinka, James Brevig, Julie McDonald, Ruyun Jin

Preoperative Hyponatremia and Cardiopulmonary Bypass: Yet Another Factor for Cerebral Dysfunction?
Richard Warwick, Kenneth Palmer, Ian Johnson,
Michael Poullis

Patient Directed Perfusion Pressure on Bypass, an Analogy from Electrical Engineering—A New Concept
Richard Warwick, Robert Poole, Kenneth Palmer,
Ian Johnson, Michael Poullis

In Vitro Comparison of the New In-Line Monitor BMU 40 versus a Conventional Laboratory Analyzer
F. Oliver Grosse, David Holzhey, Volkmar Falk,
Jan Schaarschmidt, Klaus Kraemer, Friedrich W. Mohr

Arterial Filter Bypass Loop: What Occurs in this Area during Cardiopulmonary Bypass and Are There Potential Patient Implications
Justin L. Hawkins, Gerard J. Myers, Jean-Francois Légaré,
Wilfred Swyer

In Vitro Circuit Stability of 5-Fluorouracil and Oxaliplatin in Support of Hyperthermic Isolated Hepatic Perfusion
Heidi Colville, Ryan Dzadony, Rebecca Kemp,
Stephen Stewart, Herbert J. Zeh III, David L. Bartlett,
Julianne Holleran, Kevin Schombert, Juliann E. Kosovec,
Merrill J. Egorin, Jan H. Beumer

CASE REPORT

Transport of Critically Ill Children on Cardiopulmonary Support Assistance
Maher K. Eldadah, Monica C. Olsen, Harun Fakioglu,
William M. DeCampli

ABSTRACTS

American Society of ExtraCorporeal Technology 48th International Conference
A Review of Antiplatelet Drugs, Coronary Artery Diseases and Cardiopulmonary Bypass
Yajun Ren, Kirti Patel, Terry Crane
J ExtraCorp Tech 2010: 42(2): 103–113

The Effect of the Perioperative Blood Transfusion and Blood Conservation in Cardiac Surgery Clinical Practice Guidelines of the Society of Thoracic Surgeons and the Society of Cardiovascular Anesthesiologists upon Clinical Practices
Donald S. Likosky, Daniel C. FitzGerald, Robert C. Groom, Dwayne K. Jones, Robert A. Baker, Kenneth G. Shann, C. David Mazer, Bruce D. Spiess, Simon C. Body

Perfusion Techniques Toward Bloodless Pediatric Open Heart Surgery
Vincent F. Olshove, Jr, Thomas Preston, Daniel Gomez, Alistair Phillips, Mark Galantowicz

An In-Vitro Comparison between Hemobag® and Non-Hemobag® Ultrafiltration Methods of Salvaging Circuit Blood Following Cardiopulmonary Bypass
Ed Delaney, David Rosinski, Harvey Ellis, Keith A. Samolyk, Jeffrey B. Riley

Evaluation of Quadrox-i® Adult Hollow Fiber Oxygenator with Integrated Arterial Filter
Yulong Guan, Xiaowei Su, Robert McCoach, Robert Wise, Allen Kunselman, Akif Ündar

Evaluation of Basic Perfusion Techniques, ECCSIM-Lite Simulator
Asako Tokumine, Shinji Ninomiya, Megumi Tokaji, Tatsuya Kurosaki, Yasuko Tomizawa
J ExtraCorp Tech 2010: 42(2): 139–144

Self-priming Hemodynamic Reservoir and Inline Flow Meter for a Cardiopulmonary Bypass Simulation
David Raasch, Jon Austin, Richard Tallman

Biventricular Pacing in Conjunction with Epicardial Atrial Pacing Adversely Affects Timing of Intra-Aortic Balloon Pump
David A. Cross, William E. Johnston

Disconnection of Cobe SMArxT® Tubing from the Venous Outlet of the Terumo Capiox® SX25RX Oxygenator During Cardiopulmonary Bypass
Jane Ottens, Robert A. Baker, Andrew J. Sanderson, Richard F. Newland

The Children’s Hospital Boston Non-Routine Event Reporting Program
Gregory S. Matte, Daniel Riley, Robert LaPierre, Robert Howe, Mark Anderson, Sharon Boyle, Linda Durham, William Regan, Frank Pigula

Identifying Neonatal and Pediatric Cardiac and Congenital Diaphragmatic Hernia Extracorporeal Membrane Oxygenation Patients at Increased Mortality Risk
Gary Grist, Carrie Whittaker, Kellie Merrigan, Jason Fenton, Eugenia Pallotto, Erica Molitor-Kirsch, Daniel Ostlie, James O’Brien, Gary Lofland

Improving Cardiopulmonary Bypass: Does Continuous Blood Gas Monitoring Have a Role to Play?
Jane Ottens, Sigrid C. Tuble, Andrew J. Sanderson, John L. Knight, Robert A. Baker

Modified Surface Coatings and their Effect on Drug Adsorption within the Extracorporeal Life Support Circuit
Thomas J. Preston, Todd M. Ratliff, Daniel Gomez, Vincent F. Olshove, Jr., Kathleen K. Nicol, Cheryl L. Sargel, Louis G. Chicoine

Is the Air Handling Capability of the Quadrox D Pump Dependent within an ECMO Circuit? An In Vitro Study
Martin C. Gill, Hayden Dando, John Dittmer

Monitoring Microemboli During Cardiopulmonary Bypass with the EDAC® Quantifier
John E. Lynch, Christopher Wells, Tom Akers, Paul Frantz, Donna Garrett, M. Lance Scott, Lisa Williamson, Barbara Agnew, John K. Lynch

Blood Temperature Management and Gaseous Microemboli Creation: An In-Vitro Analysis
Joseph Sleep, Ingrid Syhre, Ed Evans
Pediatric Cardiopulmonary Bypass Adaptations for Long-Term Survival of Baboons Undergoing Pulmonary Artery Replacement

TECHNIQUE ARTICLE

Novel Multi-Functional Life Support System
David P. Webb, Darren Jackson, Ehab S. Kasasbeh, Jayant Bagai, David X. Zhao

CASE REPORTS

Diagnosis of Inadvertent Cannulation of the Azygos Vein During Cardiopulmonary Bypass
Michael Cordisco, Jordanna Newberger, Kenneth G. Shann, Nicholas B. Mellas

Minimizing Reperfusion Injuries: Successful Resuscitation Using eCPR After Cardiac Arrest on a Post-Operative Norwood Patient
Keith Amberman, Irving Shen

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2010 JOHN H. GIBBON LECTURE

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William J. DeBois

GUEST EDITORIAL

Back to the Stacks – Looking at Classic Papers Related to the Current Practice of Cardiopulmonary Bypass
Joseph J. Sistino

REVIEW ARTICLE

Extracorporeal Life Support for Pandemic Influenza: The Role of Extracorporeal Membrane Oxygenation in Pandemic Management
Ed DeLaney, Michael J. Smith, Brian T. Harvey, Keith J. Pelletier, Michael P. Aquino, Justin M. Stone, Gerald C. Jean-Baptiste, Julie H. Johnson

ORIGINAL ARTICLES

Is There an Association between Hyperglycemia and Clinical Outcome in Adult Patients Receiving Extracorporeal Membrane Oxygenation
Song Lou, Jingwen Li, Cun Long, Feilong Hei, Kun Yu, Shigang Wang

Hyaluronan Based Heparin Free Coated Open and Closed Extracorporeal Circuits for High Risk Coronary Revascularization
Serdar Gunaydin, Halil Ibrahim Ucar, Tanzer Serter, Kevin McCusker, Gokhan Ozcelik, Nevriye Salman, Ali Cem Yorgancioglu

Using Biomarkers to Improve the Preoperative Prediction of Death in Coronary Artery Bypass Graft Patients
Jeremiah R. Brown, Todd A. MacKenzie, Lawrence J. Dacey, Bruce J. Leavitt, John H. Braxton, Benjamin M. Westbrook, Robert E. Helm, John D. Klemperer, Carmine Frumento, Gerald L. Sardella, Cathy S. Ross, Gerald T. O’Connor, for the Northern New England Cardiovascular Disease Study Group

Patient Directed Bypass: Cooling for Aortic Surgery – A Preliminary Concept
Kenneth Palmer, Tim Ridgway, Omar Al-Rawi, Ian Johnson, Michael Poullis

Vicarious Audiovisual Learning in Perfusion Education
Thomas E. Rath, David W. Holt