Presidential Address

965 Who are we—Who will we be?
Bruce W. Lytle, MD, Cleveland, OH

Statement

976 A statement on ethics from the HEART Group

Editorials

979 The university, creativity, and freedom
Gerald D. Buckberg, MD, Los Angeles, Calif

984 “We didn’t expect dementia and diapers”: Reflections on the Nihon experience with type A aortic dissection in octogenarians
Martin F. McKneally, MD, PhD, Toronto, Ontario, Canada

986 Cell therapy in ischemic settings: Fact and fiction
Gino Gerosa, MD, and Chiara d’Agostino, MD, Padova, Italy

Cardiopulmonary Support and Physiology (CSP)

991 Regional remodeling strain and its association with myocardial apoptosis after myocardial infarction in an ovine model
Godfred K. Yankey, MD, Tieluo Li, Ahmet Kilic, MD, Guangming Cheng, MD, PhD, Aditee Satpute, MD, Kinjal Savai, MSc, Shuying Li, BSc, Sina L. Moainie, MD, Deyanira Prastein, MD, Christopher DeFillipi, MD, Zhongjun J. Wu, MD, and Bartley P. Griffith, MD, Baltimore, Md

The objective of this study was to investigate the relationship between myocardial apoptosis and strain during progressive cardiac remodeling. We determined that increase in regional remodeling strain led to an increase in myocardial apoptosis and regional contractile dysfunction in heart failure.

999 The inflammatory effect of cardiopulmonary bypass on leukocyte extravasation in vivo

This study used the cantharidin skin blister technique as a novel translational tool to examine extravascular trafficking of leukocytes during surgical intervention. Cardiothoracic surgery with cardiopulmonary bypass triggered significantly enhanced leukocyte trafficking into the skin, but this was inhibited by an anti-inflammatory agent, aprotinin.
Topical negative pressure therapy of a sternotomy wound increases sternal fluid content but does not affect internal thoracic artery blood flow: Assessment using magnetic resonance imaging
Rainer Petzina, MD, Martin Ugander, MD, PhD, Lotta Gustafsson, MSc, PhD, Henrik Engblom, MD, PhD, Roland Hetzer, MD, PhD, Håkan Arheden, MD, PhD, Richard Ingemansson, MD, PhD, and Malin Malmsjö, MD, PhD, Lund, Sweden, and Berlin, Germany

TNP increases sternotomy wound edge tissue fluid and/or blood content. A pressure gradient is created that presumably draws fluid from the surrounding tissue to the sternal wound edge and into the vacuum source. This “endogenous drainage” may be a key mechanism for resolving osteitis by TNP in poststernotomy mediastinitis.

Prevention of local tumor growth with paclitaxel-loaded microspheres
Solomon M. Azouz, MS, Joseph Walpole, BS, Sepideh Amirifeli, MD, Kendra N. Taylor, PhD, Mark W. Grinstaff, PhD, and Yolonda L. Colson, MD, PhD, Boston, Mass

By using murine tumor models, the current study has established the feasibility and proof of concept that paclitaxel-loaded poly-(D,L-lactic-co-glycolic acid) microspheres can locally deliver chemotherapy and effectively prevent the local establishment and growth of lung cancer cells in vitro and in vivo.

Extension of survival by resection of asynchronous renal cell carcinoma metastases to mediastinal lymph nodes
Bryan A. Whitson, MD, Shawn S. Groth, MD, Rafael S. Andrade, MD, Laurel Garrett, BS, Arkadiusz Z. Dudek, MD, PhD, Jose Jessurun, MD, and Michael A. Maddaus, MD, Minneapolis, Minn

Resection of mediastinal renal cell carcinoma metastases results in extension of survival.

Reduced membranous β-catenin protein expression is associated with metastasis and poor prognosis in squamous cell carcinoma of the esophagus
Po-Kuei Hsu, MD, Anna Fen-Tau Li, MD, PhD, Yi-Ching Wang, PhD, Chih-Cheng Hsieh, MD, Min-Hsiung Huang, MD, Wen-Hu Hsu, MD, and Han-Shui Hsu, MD, PhD, Taipei, Taiwan

Reduced membranous β-catenin protein expression was associated with the presence of distant metastasis and a poor prognosis in patients with ESCC. Combined increased p53 and reduced membranous β-catenin protein expression indicated a very poor prognosis in patients with ESCC.

Growing clinical evidence for the interaction of the p53 genotype and response to induction chemotherapy in advanced non–small cell lung cancer
Daniela Kandioler, MD, Georgios Stamatis, MD, Wilfried Eberhardt, MD, Sonja Kappel, PhD, Sabine Zöchbauer-Müller, MD, Irene Kührer, MD, Martina Mittlböck, PhD, Ronald Zwretk, MD, Clemens Aigner, MD, Christoph Bichler, JD, Victoria Tichy, JD, Marcus Hudec, PhD, Thomas Bachleitner, MD, Adelheid Endl, MD, Michael Kolf Müller, MD, Erich Roth, PhD, and Walter Klepetko, MD, Vienna, Austria, and Essen-Heidhausen, Germany

The present publication provides clinical evidence that the p53 genotype predicted response to cisplatin-based induction therapy in advanced NSCLC.
Surgery for Acquired Cardiovascular Disease (ACD)

1042 Should emergency surgical intervention be performed for an octogenarian with type A acute aortic dissection? Mitsumasa Hata, MD, PhD, Akira Sezai, MD, Tetsuya Niino, MD, Masataka Yoda, MD, Satoshi Unosawa, MD, Nobuyuki Furukawa, MD, Shunji Osaka, MD, Tomohiko Murakami, MD, and Kazutomo Minami, MD, Tokyo, Japan

We reviewed octogenarians with type A AAD and assessed the prognosis. Emergency surgery for octogenarians with AAD showed acceptable mortality. However, families had to take responsibility for patients who experienced unconsciousness, had dementia, or became bedridden. It is important to have consensus between the family and surgeons.

1047 Diabetes mellitus as a risk factor for pulmonary complications after coronary bypass surgery Achim H. Lauruschkat, MD, Bert Arnrich, MS, Alexander A. Albert, MD, Jörg A. Walter, PhD, Berthold Amann, MD, Ulrich P. Rosendahl, MD, Tejas Alexander, MD, and Jürgen Ennker, MD, Lahr, Bielefeld, and Berlin, Germany

We investigated whether patients with diabetes are particularly at risk of pulmonary complications during the perioperative stage of coronary bypass surgery. Our results indicate that predominantly patients with undiagnosed and insulin-treated diabetes have a higher risk of having pulmonary complications after coronary operations.

1054 Acute hemodynamic and functional effects of surgical ventricular restoration and heart transplantation in patients with ischemic dilated cardiomyopathy Maurizio Cotrufo, MD, Luca Salvatore De Santo, MD, Alessandro Della Corte, MD, GianPaolo Romano, MD, Cristiano Amarelli, MD, Marisa De Feo, MD, Giuseppe Santarpino, MD, Michelangelo Scardone, MD, and Gianantonio Nappi, MD, Naples, Italy

This study evaluated functional capacity after the 2 strategies of surgical ventricular restoration (SVR) and transplantation for severe postischemic left ventricular dysfunction. Both surgical strategies resulted in a significant and comparable improvement of functional capacity at the 6-month evaluation. Further studies are needed to determine the long-term benefits of SVR.

1061 Analysis of benign ventricular tumors: Long-term outcome after resection Andrew W. ElBardissi, BS, Joseph A. Dearani, MD, Richard C. Daly, MD, Charles J. Mullany, MD, Thomas A. Orszulak, MD, Francisco J. Puga, MD, and Hartzell V. Schaff, MD, Rochester, Minn

There have been no large studies of surgical outcome after ventricular tumor resection. We performed a retrospective cohort study of atrial versus ventricular tumor resection. Short- and long-term outcome after ventricular tumor resection was comparable to that of atrial tumors. Early surgical treatment should be considered for patients with ventricular tumors.

1069 Comparable three months’ outcome of total arterial revascularization versus conventional coronary surgery: Copenhagen Arterial Revascularization Randomized Patency and Outcome trial Sune Damgaard, MD, Jens T. Lund, MD, Nikolaj B. Lilleør, RN, Mario J. Perko, MD, DMSc, Kåre Sander, MD, DMSc, Blagoja Dimo, MD, Maiken B. Jensen, MD, Jan K. Madsen, MD, DMSc, Henning Kelbæk, MD, DMSc, and Daniel A. Steinbrüchel, MD, DMSc, Copenhagen, Denmark

The short-term safety of total arterial revascularization for coronary bypass surgery after patient discharge from the hospital is unclear. This randomized single-center trial of 331 patients undergoing total arterial versus conventional revascularization shows comparable clinical outcomes in-hospital and after 3 months.

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1076  Prosthesis–patient mismatch affects long-term survival after mechanical valve replacement
Shun Kohsaka, MD, Shaulnie Mohan, BA, Salim Virani, MD, Vei-Vei Lee, MS, Ariadna Contreras, MD, George J. Real, MD, and Stephanie A. Coulter, MD, Houston, Tex

Prosthesis–patient mismatch occurred in 43% of 469 consecutive patients who underwent aortic valve surgery between 1995 and 1998. Those with significant mismatch had worse long-term outcomes than patients with minimal mismatch, even with adjustment for the observed differences in baseline characteristics, including propensity score, between the mismatch groups.

1081  Percutaneous aortic valve replacement: Endovascular resection of human aortic valves in situ
René Quaden, MD, Tim Attmann, MD, Michael Schünke, MD, PhD, Dirk Theisen-Kunde, Dipl-Ing, Jochen Cremer, MD, PhD, and Georg Lutter, MD, PhD, Kiel, Braunschweig and Luebeck, Germany

This study demonstrates the feasibility of endovascular resection of human aortic valves in situ. This is a subsequent step toward complete percutaneous replacement (resection and implantation) of human aortic valves.

1087  Mitral valve repair with the new semirigid partial Colvin–Galloway Future annuloplasty band
Rüdiger Lange, MD, Thomas Guenther, MD, Birgit Kiefer, MD, Christian Noebauer, MD, Wolfgang Goetz, MD, Raymonde Busch, MD, Peter Tassani-Prell, MD, Bernhard Voss, MD, and Robert Bauernschmitt, MD, Munich, Germany

The study reports the midterm results of 437 patients who underwent mitral valve annuloplasty using the semirigid Colvin–Galloway Future band (Medtronic Inc, Minneapolis, Minn). The low early (2.7%) and late mortality, excellent functional outcome, and low incidence of reoperation demonstrate that this is a safe and effective device for mitral annuloplasty.

1094  Magnetic resonance imaging-based finite element stress analysis after linear repair of left ventricular aneurysm
Joseph C. Walker, PhD, Mark B. Ratcliffe, MD, Peng Zhang, MD, PhD, Arthur W. Wallace, MD, PhD, Edward W. Hsu, PhD, David A. Saloner, PhD, and Julius M. Guccione, PhD, San Francisco and Berkeley, Calif, and Durham, NC

Linear repair was performed on 6 sheep with anteroapical aneurysm. With the exception of the retained septal infarct, systolic stress was reduced after linear repair and stroke volume was maintained.

1103  Risk factors for early and late mortality after thoracic endovascular aortic repair
Ali Khoynezhad, MD, Carlos E. Donayre, MD, Jennifer Smith, MD, George E. Kopchok, BS, Irwin Walot, MD, and Rodney A. White, MD, Omaha, Neb, Torrance, Calif

The risk factors of death after thoracic aortic endovascular repair were analyzed using statistical software. An independent risk factor of early mortality is type I procedural endoleak. Risk factors for late mortality after thoracic endovascular aortic repair are chronic obstructive pulmonary disease, postoperative myocardial infarction, and acute renal failure.

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Myocardial injury in coronary artery bypass grafting: On-pump versus off-pump comparison by measuring high-sensitivity C-reactive protein, cardiac troponin I, heart-type fatty acid–binding protein, creatine kinase-MB, and myoglobin release

Ujjwal K. Chowdhury, MCh, Diplomate NB, Vishwas Malik, DM, Rakesh Yadav, DM, Sandeep Seth, DM, Lakshmy Ramakrishnan, PhD, Mani Kalaivani, MSc (Biostatistics), Srikrishna M. Reddy, MS, Ganapathy K. Subramaniam, MCh, Raghu Govindappa, MS, and Madhava Kakani, MD, New Delhi, India

The release pattern of different cardiac biomarkers and the diagnostic discrimination limits of each marker protein were investigated in serial blood samples on 50 patients undergoing beating- and arrested-heart revascularization to evaluate perioperative myocardial injury.

The outcomes of operations for 539 patients with Ebstein anomaly

Morgan L. Brown, MD, Joseph A. Dearani, MD, Gordon K. Danielson, MD, Frank Cetta, MD, Heidi M. Connolly, MD, Carole A. Warnes, MD, Zhuo Li, MS, David O. Hodge, MS, and David J. Driscoll, MD, for the Mayo Clinic Congenital Heart Center, Rochester, Minn

From 1972 through 2006, 539 patients with Ebstein anomaly had 604 operations at the Mayo Clinic. Patients had a low perioperative mortality and good long-term survival. Risk factors for a poorer outcome include right and/or left ventricular dysfunction; evidence of cyanosis; male sex; and right ventricular obstruction.

The morphologic left ventricle that requires training by means of pulmonary artery banding before the double-switch procedure for congenitally corrected transposition of the great arteries is at risk of late dysfunction

David W. Quinn, FRCS, Simon P. McGuirk, FRCS, Chetan Metha, MRCP, Peter Nightingale, PhD, Joseph V. de Giovanni, FRCP, Rami Dhillon, MRCP, Paul Miller, MRCS, Oliver Stumper, MD, John G. Wright, FRCP, David J. Barron, MD, FRCS, and William J. Brawn, FRCS, FRACS, Birmingham, United Kingdom

The effect of morphologic left ventricle (mLV) training by means of pulmonary artery banding on survival and mLV function after the double-switch procedure for congenitally corrected transposition of the great arteries was studied.

Feasibility of the extracardiac conduit Fontan procedure in patients weighing less than 10 kilograms

Akio Ikai, MD, PhD, Yoshifumi Fujimoto, MD, Keiichi Hirose, MD, PhD, Noritaka Ota, MD, Yuko Tosaka, MD, Tomohiro Nakata, MD, Yujiro Ide, MD, and Kisaburo Sakamoto, MD, Shizuoka, Japan

We performed 72 extracardiac conduit Fontan procedures with PTFE conduits in patients weighing less than 20 kg and evaluated their feasibility, especially in patients weighing less than 10 kg. The early outcome of the procedure was satisfactory in patients weighing less than 10 kg. However, the required size of the conduit remains debatable.

Ruptured sinus of Valsalva aneurysm: Transaortic repair may cause sinus of Valsalva distortion and aortic regurgitation

Sung-Ho Jung, MD, Tae-Jin Yun, MD, PhD, Yu-Mi Im, MS, Jeong-Jun Park, MD, Hyun Song, MD, Jae-Won Lee, MD, Dong-Man Seo, MD, and Moo-Song Lee, MD, PhD, Seoul, Korea

We developed a new surgical technique for ruptured sinus of Valsalva aneurysm, consisting of (1) primary closure of the fistula from the chamber into which the aortic sinus ruptured and (2) placement of a supporting patch. This “non-transaortic approach” was associated with a lower risk of recurrent or new-onset AR.

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Cardiothoracic Transplantation (TX)

1159 Prognosis of patients removed from a transplant waiting list for medical improvement: Implications for organ allocation and transplantation for status 2 patients
Katherine J. Hoercher, RN, Edward R. Nowicki, MD, MS, Eugene H. Blackstone, MD, Gurmeet Singh, MD, Joan M. Alster, MS Gonzalez-Stawinski, MD, Randall C. Starling, MD, MPH, James B. Young, MD, and Nicholas G. Smedira, MD, Cleveland, Ohio

Medically improved patients removed from our heart transplant waiting list experienced heart failure return and sudden cardiac death. Short-term survival was better than for similar patients after transplantation, but long-term survival was worse. Status 2 patients require vigilant surveillance, optimal medical management, implantable cardioverter–defibrillators, and a revised approach to transplantation timing.

Brief Communications

1167 Case report of visceral ischemia: The “tail” of an intra-aortic balloon pump
Justin Rivard, MD, Ashley Vergis, MD, and Diamond Kassum, MA, MB, BChir, FRCSC, Winnipeg, Manitoba, Canada

1169 A combined approach for ischemic mitral valve regurgitation: Scar plication and the role of magnetic resonance imaging
Rafael García-Fuster, MD, PhD, Ignacio Rodríguez, MD, Jordi Estornell, MD, and Juan Martínez-León, MD, PhD, Valencia, Spain

1172 Recurrence of myxoma in the left ventricle with concurrent cerebral fusiform aneurysms after previous atrial myxoma surgery
John-Peder Escobar Kvitting, MD, PhD, Jan Engvall, MD, PhD, Mats Broqvist, MD, PhD, Stefan Franzén, MD, Mats Andersson, MD, Ulf Ohlsson, MD, and Niels Erik Nielsen, MD, PhD, Linköping and Oskarshamn, Sweden

1174 Aortic dissection in a young man with Loeys–Dietz syndrome
Vojtech Melenovsky, MD, PhD, Marek Adamira, MD, Dana Kautznerova, MD, Ludek Voska, MD, Jiri Weichet, MD, PhD, Bart Loeye, MD, PhD, and Jan Pirk, MD, PhD, Prague, Czech Republic, and Ghent, Belgium

1176 Reverse diastolic flow in the common carotid artery in severe aortic regurgitation, causing brain ischemia
Naoto Morimoto, MD, Keisuke Morimoto, MD, Yoshihisa Morimoto, MD, Toshitoh Sakamoto, MD, Masamichi Matsumori, MD, Kenji Okada, MD, and Yutaka Okita, MD, Kobe, Japan

1178 Dehiscence of aortic valve commissure complicated by aortic regurgitation
Toshihiro Fukai, MD, Tomoki Shimokawa, MD, Ken-u Fumimoto, MD, Susumu Mananbe, MD, Naomi Ozawa, MD, and Shuichiro Takanashi, MD, Tokyo, Japan

1180 Early failure of bioprostheses caused by adhesion of preserved leaflets after chordal-sparing mitral valve replacement
Jason O. Robertson, BS, Amir K. Durrani, BS, and Tomislav Mihaljevic, MD, Cleveland, Ohio

1182 Right ventricular exclusion procedure with total cavopulmonary connection: An alternative operative approach in adults with severe Ebstein anomaly
Anastasios C. Polimenakos, MD, Brian L. Reemtsen, MD, Winfield J. Wells, MD, and Vaughn A. Starnes, MD, Los Angeles, California

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Atypical bronchoplasty to preserve the lung parenchyma: The bronchofolding technique
Mitsuhiro Kamiyoshihara, MD, PhD, Takashi Ibe, MD, Atsushi Takise, MD, PhD, and Izumi Takeyoshi, MD, PhD, Gunma, Japan

Use of a prefabricated pectoralis major muscle flap and pedicled jejunal interposition graft for salvage esophageal reconstruction after failed gastric pull-up and colon interposition
K. Robert Shen, MD, William Gerald Austen, Jr, MD, and Douglas J. Mathisen, MD, Boston, Massachusetts

Letters to the Editor

The importance of distal fixation in total arch replacement for distal aortic arch aneurysm
Mitsuru Asano, MD, and Yutaka Okita, MD, Kobe, Japan

Reply
Koichi Toda, MD, Kazuhiro Taniguchi, MD, Takenori Yokota, MD, and Satoshi Kainuma, MD, Osaka, Japan

Tissue-engineered heart valves: Bioreactor—yes or no?
Luca Dainese, MD, Fabio Barili, MD, and Paolo Biglioli, MD, Milan, Italy

Reply
Andre´ Vincentelli, MD, PhD, Francis Juthier, MD, and Brigitte Jude, MD, PhD, Lille, France

Events of Interest

Events

Announcements

The American Association for Thoracic Surgery

Announcement of 2008 Annual Meeting

Applications for Membership

Evarts A. Graham Memorial Traveling Fellowship, 2009-2010

Resident Traveling Fellowship, 2008-2009

Third Edward D. Churchill Research Scholarship 2009-2011

The Western Thoracic Surgical Association

Announcement of 2008 Annual Meeting

Applications for Membership

The American Board of Thoracic Surgery

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