

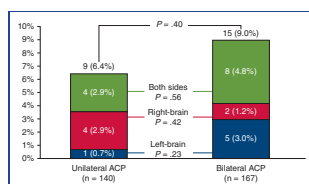


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Adult Articles in AATS Journals

611 Adult

Adult: Aorta



617 Unilateral is comparable to bilateral antegrade cerebral perfusion in acute type A aortic dissection repair



Elizabeth L. Norton, MS, Xiaoting Wu, PhD, Karen M. Kim, MD, Himanshu J. Patel, MD, G. Michael Deeb, MD, and Bo Yang, MD, PhD, Omaha, Neb, and Ann Arbor, Mich

Unilateral ACP provides adequate cerebral protection and achieves favorable short-term outcomes and mid-term survival in acute type A aortic dissection repair as effectively as bilateral ACP.

626 Commentary: Have we finally settled the debate of unilateral versus bilateral antegrade cerebral perfusion for brain protection during type A repair?

Francois Dagenais, MD, Québec, Québec, Canada

Unilateral antegrade cerebral perfusion should be the preferred method of cerebral protection during hemiarch and proximal arch procedures for type A aortic dissection. The safety during full arch procedures requires further investigation.

627 Commentary: Can unilateral antegrade cerebral perfusion constitute a unified method for acute type A aortic dissection repair?

Hitoshi Matsuda, MD, PhD, and Soichiro Kitamura, MD, PhD, Suita, Japan

Conversion of unilateral to bilateral antegrade cerebral perfusion was encountered in 2%. It is wise to know the utility of both unilateral and bilateral antegrade cerebral perfusion and to then use the more effective form of antegrade cerebral perfusion for each patient rather than unified antegrade cerebral perfusion.



629 Handmade fenestrated stent grafts to preserve all supra-aortic branches in thoracic endovascular aortic repair



Huey-Shiuan Kuo, MD, Jih-Hsin Huang, MD, and Jer-Shen Chen, MD, New Taipei City, Taiwan

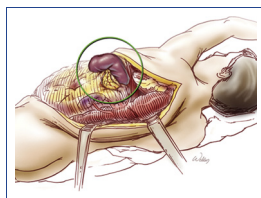
The handmade fenestrated stent graft is a reasonable strategy to achieve endovascular total arch replacement.

640 Commentary: Are we closer than we think to a customizable, endovascular total arch?

Joshua C. Grimm, MD, and Wilson Y. Szeto, MD, Philadelphia, Pa

Endovascular options for acute management of the aortic arch are limited. The authors present a novel technique of on-the-table fenestration to produce a fully customizable arch endograft.

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641 Is incidental splenectomy during thoracoabdominal aortic aneurysm repair associated with reduced survival?



Subhasis Chatterjee, MD, Scott A. LeMaire, MD, Susan Y. Green, MPH, Matt D. Price, MS, Hiruni S. Amarasekara, MS, Qianzi Zhang, MPH, Chris J. Pirko, MD, Ourania Preventza, MD, Kim I. de la Cruz, MD, S. Rob Todd, MD, and Joseph S. Coselli, MD, Houston, Tex

Operative death was increased in patients who underwent IS during TAAA repair, but among the early survivors, late survival was not adversely affected.

This article has an associated discussion and webcast.

653 **Commentary:** Splenectomy during thoracoabdominal aortic surgery: Lessons learned

Nicholas T. Kouchoukos, MD, St Louis, Mo

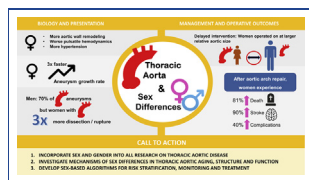
Splenectomy during thoracoabdominal aortic aneurysm repair is not an innocuous occurrence.

654 **Commentary:** The straw that broke the camel's back

Riyad Karmy-Jones, MD, FACS, FRCSC, Vancouver, Wash

The report carries the simple message that incidental splenectomy is associated with increased early mortality. The authors make a plea to make all “reasonable” efforts to avoid this “complication.”

Adult: Aorta: Invited Expert Opinion



656 **Sex differences in thoracic aortic disease: A review of the literature and a call to action**



Jennifer Chung, MD, MSC, Thais Coutinho, MD, Michael W. A. Chu, MD, MEd, and Maral Ouzounian, MD, PhD, Toronto, Ottawa, and London, Ontario, Canada

Important sex-related differences exist in the epidemiology, biology, management, and outcomes of patients with thoracic aortic disease.

Adult: Aorta: Letters to the Editor

e101 **Assessment of wall stress distribution in thoracic ascending aortic aneurysm: Simulation, prediction, and prevention**

Wenrui Ma, MD, Yulin Liang, MS, and Chunsheng Wang, MD, Shanghai and Dalian, China

e102 **Reply:** Novel aortic imaging modalities: Mine detectors or just metal detectors

Faisal G. Bakaeen, MD, Eric E. Roselli, MD, and Lars G. Svensson, MD, PhD, Cleveland, Ohio

e102 **Reply:** Accurate evaluation of the risk of acute aortic events: Still room for improvement

Thierry Carrel, MD, Bern, Switzerland

e103 **Reply:** Imaging is not everything as regards the aorta: Tissue strength and blood pressure matter as well?

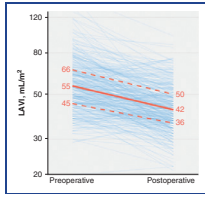
John A. Elefteriades, MD, PhD (hon), Bulat A. Ziganshin, MD, PhD, and Wei Sun, PhD, New Haven, Conn, and Atlanta, Ga

e105 **Reply from authors:** Aortic aneurysm biomechanics: Perfect is the enemy of good

Elaine E. Tseng, MD, Zhongjie Wang, PhD, and Liang Ge, PhD, San Francisco, Calif

The Journal of Thoracic and Cardiovascular Surgery (ISSN 0022-5223) is published monthly by Elsevier Inc., 230 Park Avenue, Suite 800, New York, NY 10169-0901, USA. Business Office: 1600 John F. Kennedy Blvd, Suite 1800, Philadelphia, PA 19103-2899, USA. Editorial Office: 230 Park Avenue, Suite 800, New York, NY 10169-0901, USA. Customer Service Office: 6277 Sea Harbor Drive, Orlando, FL 32887-4800, USA. Periodicals postage paid at New York, NY, and additional mailing offices. POSTMASTER: Send address changes to Elsevier, Journal Returns, 1799 Highway 50 East, Linn, MO 65051, USA.

Adult: Mitral Valve



661 Preoperative left atrial volume index is associated with postoperative outcomes in mitral valve repair for chronic mitral regurgitation



Parvathi Balachandran, MBBS, PhD, Hartzell V. Schaff, MD, Brian D. Lahr, MS, Anita Nguyen, MBBS, Richard C. Daly, MD, Simon Maltais, MD, PhD, Sorin V. Pislaru, MD, and Joseph A. Dearani, MD, Rochester, Minn

Preoperative LAVI is an important predictor of postoperative outcomes in patients undergoing MV repair for chronic MR.

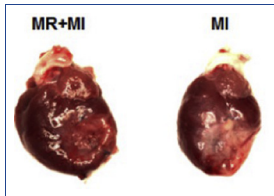
This article has an associated discussion and webcast.

673 Commentary: At the heart of the matter—Left atrial volume index in chronic mitral regurgitation

Madeline L. Fryer, MMSc, and Leora B. Balsam, MD, Worcester, Mass

Evidence-based guidelines aid in determining the timing of mitral repair for degenerative disease. The usefulness of left atrial volume index in this decision making is explored in a new study.

Adult: Mitral Valve: Basic Science



e107 Mitral regurgitation worsens cardiac remodeling in ischemic cardiomyopathy in an experimental model



Daisuke Onohara, MD, PhD, Daniella Corporan, BS, Roberto Hernandez-Merlo, DVM, Robert A. Guyton, MD, and Muralidhar Padala, PhD, Atlanta, Ga

Ischemic hearts with mitral regurgitation had persistently higher chamber volumes than those without mitral regurgitation. Chamber wall stress and stroke work were higher, potentially increasing myocardial metabolic demands.

e127 Commentary: From the bedside to the laboratory and back

Abe DeAnda, Jr, MD, and Vincent R. Conti, MD, Galveston, Tex

Despite a number of clinical trials and studies, optimal management of IMR remains unclear. This study provides some groundwork to improve our understanding.

e129 Commentary: Escape valve for the pressures of life

Tomasz A. Timek, MD, PhD, Grand Rapids, Mich

Mitral regurgitation adversely influences chamber remodeling in the setting left ventricular infarction.

Adult: Endocarditis: Letters to the Editor

e131 Infective endocarditis in intravenous drug users in Europe: A clean start?

Nick Chilvers, MRCS, and Stephen C. Clark, FACS, FRCP, FRCS, Newcastle upon Tyne, United Kingdom

e132 Reply: Drug-associated infective endocarditis is a worldwide mutual challenge

Ari A. Mennander, MD, PhD, Tampere, Finland

e133 Reply: Across-the-pond differences in drug-related endocarditis

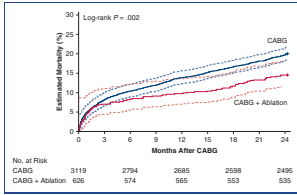
Dimitri Kalavrouziotis, MD, FRCSC, and Siamak Mohammadi, MD, FRCSC, Quebec City, Canada

e133 Reply from authors: Identifying lessons that could be generalized across different disease burdens

Makoto Mori, MD, and Arnar Geirsson, MD, New Haven, Conn

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Adult: Coronary



675 Surgical ablation of atrial fibrillation concomitant to coronary-artery bypass grafting provides cost-effective mortality reduction

J. Scott Rankin, MD, Daniel J. Lerner, MD, Mary Jo Braid-Forbes, MPH, Michelle M. McCrea, MS, and Vinay Badhwar, MD, Morgantown, WV; Scarsdale, NY; and Silver Spring, Md

Surgical ablation in patients with atrial fibrillation undergoing coronary artery bypass grafting is associated with a reduction in 2-year unadjusted mortality and risk-adjusted hazard of late mortality (90 days to 2 years) without an increase in total risk-adjusted inpatient cost.

This article has an associated discussion and webcast.

687 Commentary: Excitement at the interface of disciplines: The mean cumulative function

Eugene H. Blackstone, MD, and Jeevanantham Rajeswaran, PhD, Cleveland, Ohio

Both analysis of repeated events, such as rehospitalizations, and the costs of those events can be graphically depicted and analyzed multivariably using the mean cumulative function.

689 Commentary: Is surgical ablation concomitant with coronary artery bypass grafting cost effective? No answers, just questions

Vijay S. Patel, MD, and Richard Lee, MD, MBA, Augusta, Ga

The cost-effectiveness of concomitant surgical ablation remains undefined, despite growing evidence for its perioperative and midterm to long-term morbidity and mortality benefits.

Adult: Coronary: Invited Expert Opinion



691 The surgeon's role in optimizing medical therapy and maintaining compliance with secondary prevention guidelines in patients undergoing coronary artery bypass grafting

Harold L. Lazar, MD, Boston, Mass

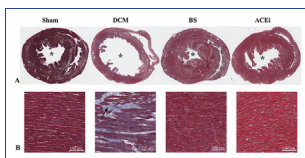
Compliance with guideline-directed medical therapy following coronary artery bypass grafting (CABG) is poor. Surgeons must play a larger role in strategies and interventions to maintain compliance with secondary prevention guidelines to achieve the best long-term outcomes in CABG patients.

699 Commentary: Guideline-directed therapy is extremely valuable, but not always current or followed

Andrea J. Carpenter, MD, PhD, and Dawn Hui, MD, San Antonio, Tex

Surgeons must actively consider and initiate perioperative guideline-directed therapy to support optimal long-term outcomes for patients undergoing surgical revascularization.

Adult: Coronary: Basic Science



e135 Effect of bilateral sympathectomy in a rat model of dilated cardiomyopathy induced by doxorubicin

Raphael dos Santos Coutinho e Silva, BSc, Fernando Luiz Zanoni, DVM, PhD, Rafael Simas, PhD, Mateus Henrique Fernandes Martins da Silva, MD, Roberto Armstrong Junior, BSc, Cristiano de Jesus Correia, PhD, Ana Cristina Breithaupt Faloppa, PhD, and Luiz Felipe Pinho Moreira, MD, PhD, São Paulo, Brazil

BS prevents LV remodeling and preserves cardiac function in a doxorubicin model of DCM.

e145 **Commentary:** Contain your excitement: Expanding the role of bilateral sympathectomy in heart disease

Peter J. Altshuler, MD, and Pavan Atluri, MD, Philadelphia, Pa

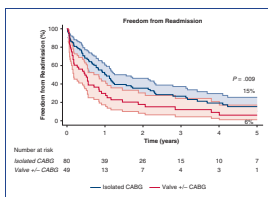
Early data regarding sympathetic blockade via bilateral sympathectomy show promising results as a potential treatment modality for cases of dilated cardiomyopathy refractory to standard care

e147 **Commentary:** Sympathectomy for cardiomyopathy: It's a matter of nerves

Donald D. Glower, MD, Durham, NC

In a rat model of doxorubicin-induced cardiomyopathy, early bilateral sympathectomy decreased apoptosis and myocardial fibrosis.

Adult: Transplant



701 **Outcomes in patients with solid organ transplants undergoing cardiac surgery**



Valentino Bianco, DO, MPH, Arman Kilic, MD, Thomas G. Gleason, MD, Edgar Aranda-Michel, BS, Matthew E. Harinstein, MD, Floyd Thoma, BS, Forozan Navid, MD, and Ibrahim Sultan, MD, Pittsburgh, Pa

Cardiac surgery can be performed with acceptable operative and long-term mortality in patients with prior solid organ transplants, although with a higher rate of unplanned readmissions.

708 **Commentary:** The gift of life—With a price

Vivek Rao, MD, PhD, Toronto, Ontario, Canada

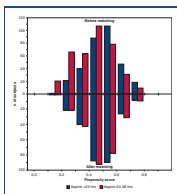
As the results of solid organ transplantation continue to improve, an increasing cohort of patients survive to develop ischemic or valvular heart disease. Surgery can be performed with acceptable outcomes.

710 **Commentary:** Surgical sequels in solid organ transplant

David L. Joyce, MD, Milwaukee, Wis

Previous solid organ transplant should not preclude consideration of subsequent cardiac surgery.

Adult: Perioperative Management



712 **Association between preoperative aspirin and acute kidney injury following coronary artery bypass grafting**



Sleiman Sebastian Aboul-Hassan, MD, Jakub Marczak, MD, PhD, Tomasz Stankowski, MD, Maciej Peksa, MD, Marcin Nawotka, MD, Ryszard Stanislawski, MD, and Romuald Cichon, MD, PhD, Nowa Sol and Warsaw, Poland; Nottingham, United Kingdom; and Cottbus, Germany

Continuation of preoperative aspirin with the last dose administered ≤ 24 hours before coronary artery bypass grafting correlates with a significantly reduced incidence of postoperative acute kidney injury.

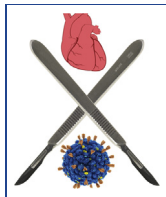
720 **Commentary:** Teaching an old dog a new trick

Jack S. Shanewise, MD, FASE, New York, NY

Patients given aspirin within 24 hours before CABG had less postoperative AKI than those given it 24 to 48 hours before. Timing of last preoperative dose may influence its renal protective effect.

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Adult: Perioperative Management: Invited Expert Opinion



722 **Cardiac surgery and the coronavirus disease 2019 pandemic: What we know, what we do not know, and what we need to do**



Faisal G. Bakaeen, MD, A. Marc Gillinov, MD, Eric E. Roselli, MD, Joanna Chikwe, MD, Marc R. Moon, MD, David H. Adams, MD, Joseph S. Coselli, MD, Joseph A. Dearani, MD, and Lars G. Svensson, MD, PhD, Cleveland, Ohio; Los Angeles, Calif; St Louis, Mo; New York, NY; Houston, Tex; and Rochester, Minn

The COVID-19 pandemic has influenced all aspects of our lives. Cardiac surgeons are faced with the challenge of caring for patients with life-threatening conditions in unprecedented circumstances.

727 **Commentary:** Cardiothoracic surgery and coronavirus disease 2019 (COVID-19): A surge of collective strength

Jason J. Han, MD, and Pavan Atluri, MD, Philadelphia, Pa

The COVID-19 pandemic has affected every aspect of cardiothoracic surgery and society at large, requiring collaboration and leadership to move forward.

728 **Commentary:** Business as usual: A thing of the past

Tomer Z. Karas, MD, and Kevin D. Accola, MD, Orlando, Fla

A modern global crisis places cardiothoracic surgeons on the forefront of leadership and ingenuity with the challenge of defining a new normalcy for an unprecedented era in health care.

Adult: Perioperative Management: Letters to the Editor

e149 **The importance of Coronavirus Disease 2019 testing in cardiac surgery**



Giulia Maj, MD, Antonio Campanella, MD, and Andrea Audo, MD, Alessandria, Italy

e149 **Reply:** Have we done the best that we could have done?

Rakesh C. Arora, MD, PhD, FRCSC, Ansar Hassan, MD, PhD, and Jonathan W. Haft, MD, and on behalf of the Society of Thoracic Surgeons COVID-19 Taskforce, Manitoba, Winnipeg, and Saint John, New Brunswick, Canada; and Ann Arbor, Mich

Adult: Education: Invited Expert Opinion



730 **The many facets of research integrity: What can we do to ensure it?**



Desmond M. D'Souza, MD, Robert M. Sade, MD, and Susan D. Moffatt-Bruce, MD, PhD, Columbus, Ohio, and Charleston, SC

Surgeons and institutions have a central role in protecting and ensuring the integrity of research. Many factors lead to research misconduct, so many different interventions are needed to address them.

734 **Commentary:** Scientists still behaving badly

Thomas A. D'Amico, MD, Durham, NC

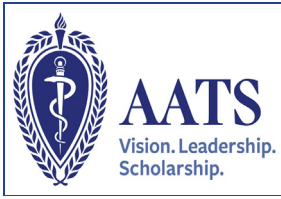
To reverse the trend of increasing scientific misconduct, we should learn what each investigator must do to ensure research integrity.

735 **Commentary:** Publish or perish at our collective peril

Jennie H. Kwon, MD, and Chadrick E. Denlinger, MD, Charleston, SC

The publish-or-perish mindset in the academic community incentivizes publication of meaningless articles, and worse, fraudulent ones.

Adult: Education: Editorial



737



American Association for Thoracic Surgery: Maintaining the mission during the coronavirus disease 2019 (COVID-19) pandemic

Marc R. Moon, MD, David R. Jones, MD, David H. Adams, MD, and Vaughn A. Starnes, MD, St Louis, Mo; New York, NY; and Los Angeles, Calif

COVID-19 has disrupted every aspect of life. In its 100-year history, the AATS has faced adversity, surviving multiple world conflicts and a pandemic similar to the current assault on global health.

Adult: Western Thoracic Surgical Association Presidential Address



740



The sparkle of creativity

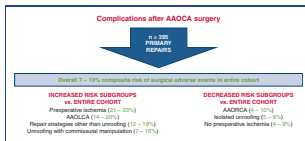
Patricia A. Thistlethwaite, MD, PhD, La Jolla, Calif

Thinking creatively leads to new discoveries and better ways to do things, enhances personal well-being and self-worth, and ultimately benefits our patients.

Congenital Articles in AATS Journals

753 Congenital

Congenital: Anomalous Coronary Artery



757



Outcomes after anomalous aortic origin of a coronary artery repair: A Congenital Heart Surgeons' Society Study

Anusha Jegatheeswaran, MD, PhD, FRCSC, Paul J. Devlin, MD, MSc, William G. Williams, MD, Julie A. Brothers, MD, Marshall L. Jacobs, MD, William M. DeCampi, MD, PhD, Craig E. Fleishman, MD, James K. Kirklin, MD, Luc Mertens, MD, PhD, Carlos M. Mery, MD, MPH, Silvana Molossi, MD, PhD, Christopher A. Caldarone, MD, Nabi Aghaei, MD, Richard O. Lorber, MD, and Brian W. McCrindle, MD, MPH, Toronto, Ontario, Canada; Philadelphia, Pa; Baltimore, Md; Orlando, Fla; Birmingham, Ala; and Austin, Houston, and San Antonio, Tex

AAOCA repair may relieve ischemia with low mortality, but can result in important morbidity varying by presentation/anatomy/repair. Avoiding commissural manipulation may reduce risk of developing AI.

This article has an associated discussion and webcast.

772

Commentary: Surgery for an anomalous aortic origin of a coronary artery: To do, or not to do? That is the question

Phillip S. Naimo, MD, Edward Buratto, MBBS, PhD, and Igor E. Konstantinov, MD, PhD, FRACS, Melbourne, Australia

The role of surgery, despite its low risk, in asymptomatic patients with AAOCA is unclear.

774

Commentary: No free lunch: What we talk about when we talk about anomalous aortic origin of a coronary artery

Jonathan M. Chen, MD, Philadelphia, Pa

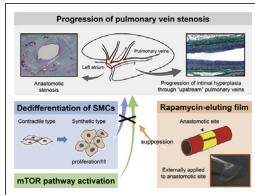
Operations to repair AAOCA are not without consequences, and these must be considered in evaluating the risk/benefit ratio of intervention versus observation.

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- 775 **Commentary:** I guess I'm just confused...isn't this information sobering?
Charles D. Fraser, Jr, MD, Austin, Tex

AAOCA is being diagnosed in many people; some patients are symptomatic, but most are asymptomatic. Many of these patients end up undergoing cardiac surgery at a time where indications for operation are not completely clear. Are these operations safe? What are the current complication rates? We really *have* to know, and the data suggest reason for more attention.

Congenital: Pulmonary Vein



- 777 **Progression of vascular remodeling in pulmonary vein obstruction**
Naoki Masaki, MD, PhD, Osamu Adachi, MD, PhD, Shintaro Katahira, MD, PhD, Yuriko Saiki, MD, PhD, Akira Horii, MD, PhD, Shunsuke Kawamoto, MD, PhD, and Yoshikatsu Saiki, MD, PhD, Sendai, Japan



SMC-like cells dedifferentiation and mTOR pathway activation may be involved in progression of PVO. Externally applied rapamycin-eluting films can transiently suppress PVO progression.

- 791 **Commentary:** Hands off the pulmonary veins!
Federica Caldaroni, MD, and Yves d'Udekem, MD, PhD, Melbourne, Australia

Careful handling of the pulmonary veins is the key to reducing vascular remodeling, and anti-proliferative agents may enhance the success rate in the most vulnerable period.

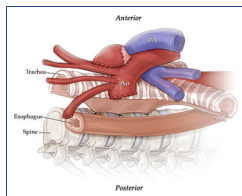
- 792 **Commentary:** The dam, the river, and the riverbank—Should we look at pulmonary vein obstruction from a different perspective?
Mauro Lo Rito, MD, Milan, Italy

Pulmonary vein obstruction is a lethal disease without effective therapy. We are looking for new treatments, such as the rapamycin patch, but we probably miss the overall picture to be successful.

- 794 **Commentary:** Targeting neointimal lesions in pulmonary vein stenosis: Fact or fiction?
Rachel D. Vanderlaan, MD, PhD, Toronto, Ontario, Canada

Neointimal formation is the hallmark of PVS. Understanding the molecular mechanisms underlying myofibroblast deposition will help design effective novel therapies.

Congenital: Vascular Ring



- 796 **Aortic uncrossing and tracheobronchopexy corrects tracheal compression and tracheobronchomalacia associated with circumflex aortic arch**
Ali Kamran, MD, Kevin G. Friedman, MD, Russell W. Jennings, MD, and Christopher W. Baird, MD, Boston, Mass



Aortic uncrossing without circulatory arrest and concomitant tracheobronchopexy is effective in treating symptomatic airway compression and tracheobronchomalacia associated with circumflex aortic arch.

This article has an associated discussion and webcast.

- 805 **Commentary:** Circumflex aorta: Entering uncrossed territory
Carl L. Backer, MD, Chicago, Ill

The aortic uncrossing operation should be considered for vascular ring patients with a circumflex aorta. There are innovative technical strategies for this procedure.

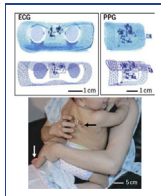
- 806** **Commentary:** Surgical management of persistent respiratory symptoms after vascular ring division
Roosevelt Bryant III, MD, Phoenix, Ariz

The aortic uncrossing procedure is an effective adjunctive surgical technique to address residual respiratory symptoms in patients who have undergone repair of a circumflex aorta or double aortic arch.

- 807** **Commentary:** A long haul and a short slide?
Michael E. Mitchell, MD, Milwaukee, Wis

Aortic uncrossing, combined with advanced tracheal procedures, might play an important role when performed correctly and applied selectively.

Congenital: Perioperative Management: Invited Expert Opinion



- 809** **Wireless monitoring and artificial intelligence: A bright future in cardiothoracic surgery**

David Kalfa, MD, PhD, Sunil Agrawal, PhD, Nimrod Goldshtrom, MD, Damien LaPar, MD, and Emile Bacha, MD, New York, NY

Machine learning and AI techniques have the potential to be used in conjunction with wireless monitoring systems to transform our specialty. Cardiothoracic surgeons should not miss this opportunity.

Congenital: Education: Health Management: Invited Expert Opinion

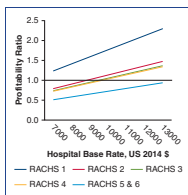


- 813** **Access or excess? Examining the argument for regionalized cardiac care**

Tara Karamlou, MD, MSc, Douglas R. Johnston, MD, Carl L. Backer, MD, Eric E. Roselli, MD, Karl F. Welke, MD, MS, Christopher A. Caldarone, MD, and Lars G. Svensson, MD, PhD, Cleveland, Ohio; Chicago, Ill; Charlotte, NC; and Houston, Tex

Regionalization of cardiac surgical services is supported by the volume–outcomes relationship and may represent a viable solution to optimize value-based care. We examine both sides of the argument for and against a regionalized cardiac surgery system.

Congenital: Education: Health Economics: Brief Research Report



- e153** **Administrators: Do you know how your pediatric cardiac surgeries are reimbursed?**

Joyce L. Woo, MD, MS, and Brett R. Anderson, MD, MBA, MS, New York, NY

Under the All Patient Refined Diagnosis-Related Group payment system, high-complexity neonatal cardiac surgeries may not be as profitable as lower-complexity neonatal cardiac surgeries.

- e155** **Commentary:** Winning or losing in neonatal cardiac reimbursement: Depends on your equation

Ronald K. Woods, MD, PhD, and Melissa Barber, MBA, Milwaukee, Wis

With diagnosis-related group reimbursement, higher-risk neonatal cardiac surgery could be less profitable or even incur net expense, but this depends on numerous institution-specific factors.

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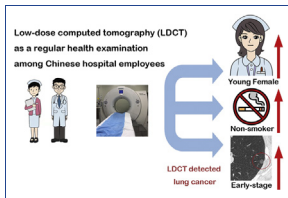
- e156** **Commentary:** Reimbursement models in pediatric cardiac surgery: The unrefined All Patient Refined Diagnosis-Related Group
Tara Karamlou, MD, MSc, Hani K. Najm, MSD, MSc, and Lars G. Svensson, MD, PhD, Cleveland, Ohio

Current reimbursement models, such as the APR-DRG, for pediatric cardiac surgery are imperfect and may not adequately reward high-complexity neonatal care.

Thoracic Articles in AATS Journals

820 Thoracic

Thoracic: Lung Cancer



- 824** **Results of low-dose computed tomography as a regular health examination among Chinese hospital employees**



Yang Zhang, MD, Sanghoon Jheon, MD, Huimin Li, MD, Huibiao Zhang, MD, Yaozeng Xie, MD, Bin Qian, MD, Kaihong Lin, MD, Shengping Wang, MD, Chen Fu, MS, Hong Hu, MD, Ying Zheng, MSc, Yuan Li, MD, and Haiquan Chen, MD, Shanghai, Linqing, Yangzhou, and Guangdong, China, and Seoul, Korea

LDCT detected lung cancer in a significant proportion of young, female, and nonsmoking employees. The vast majority of these lung cancers were early stage with an extremely good prognosis.

- 832** **Commentary:** On-demand computed tomography screening for lung cancer—some surprising results

Richard I. Whyte, MD, MBA, Boston, Mass

This lung cancer screening study of Chinese health care workers challenges the notion that CT screening should be reserved for individuals traditionally felt to be of “high risk.”

- 833** **Commentary:** Pay attention to low-risk populations for lung cancer, but cautiously interpret ground-glass nodules screened by low-dose computed tomography scan

Ke-Neng Chen, MD, PhD, Beijing, China

The traditional high-risk population for lung cancer has been changing. Nonetheless, it remains important to avoid overdiagnosis and overtreatment of ground-glass nodules.

- 835** **Commentary:** The role of low-dose computed tomography for lung cancer screening among the nonsmoking Asian population

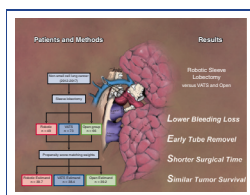
I-Hsien Lee, MD, and Chung-Yu Chen, MD, PhD, Douliu City, Taiwan (R.O.C.)

The necessity and efficacy of low-dose computed tomography screening for lung cancer, and also the risk prediction model, should be verified in Asian never-smokers.

- 836** **Commentary:** The changing risk paradigm in lung cancer: Are we opening Pandora’s box?

Simran K. Randhawa, MD, and Varun Puri, MD, MSCI, St Louis, Mo

Lung cancer screening guidelines may need to be individualized to populations.



- 838** **Robotic sleeve lobectomy for centrally located non-small cell lung cancer: A propensity score-weighted comparison with thoracoscopic and open surgery**

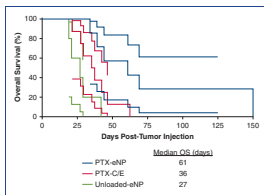


Tong Qiu, MD, Yandong Zhao, MD, PhD, Yunpeng Xuan, MD, Yi Qin, MD, Zejun Niu, MD, Yi Shen, MD, and Wenjie Jiao, MD, PhD, Qingdao, China

Compared with VATS and open techniques, robotic sleeve lobectomy is a safe, feasible, and effective procedure with a similar oncologic outcome.

- 847** **Commentary:** Why so many sleeve resections and pneumonectomies and why the nonabsorbable suture?
Robert J. Cerfolio, MD, MBA, FACS, FCCP, New York, NY
 Pneumonectomy for lung cancer should be rarely performed.
- 849** **Commentary:** Maximum surgery through minimal incisions
Richard Lazzaro, MD, and Byron Patton, MD, New York, NY
 Robotic sleeve lobectomy is a safe and feasible procedure. Training programs and mentorship opportunities will further the safe adoption of maximal surgery through minimal incisions.
- 851** **Commentary:** Sleeve lobectomy for centrally located non-small cell lung cancer: Should the approach be a matter of debate?
Arthur Vieira, MD, and Paula A. Ugalde, MD, Quebec, Quebec, Canada
 Robotic surgery led to the best postoperative outcomes after sleeve lobectomy when compared with VATS and thoracotomy. Robotic platform is a valuable surgical tool for centrally located lung cancers.
- 852** **Commentary:** Minimally invasive sleeve lobectomy—from case report curiosity to standard of care?
Nirmal K. Veeramachaneni, MD, Kansas City, Kan
 Robotic and VATS sleeve lobectomy is feasible. Surgeons who have reported excellent results have considerable experience with minimally invasive techniques.

Thoracic: Lung Cancer: Basic Science



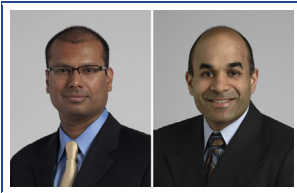
- e159** **Paclitaxel-loaded expansile nanoparticles improve survival following cytoreductive surgery in pleural mesothelioma xenografts**
Ngoc-Quynh Chu, MD, Rong Liu, MD, PhD, Aaron Colby, PhD, Claire de Forcrand, MPH, Robert F. Padera, MD, PhD, Mark W. Grinstaff, PhD, and Yolonda L. Colson, MD, PhD, Boston, Mass
 Delivery of paclitaxel via nanoparticles confers prolonged survival in pleural mesothelioma as single modality therapy for limited disease and in combination with cytoreduction for advanced disease.
- e169** **Commentary:** Local chemotherapy with nanoparticles: A ray of light in the dark?
Shota Nakamura, MD, and Toyofumi F. Chen-Yoshikawa, MD, Nagoya, Japan
 A novel therapeutic method using intrathoracic injection of paclitaxel-loaded expansile nanoparticles is promising based on its experimental model mimicking the clinical scenario of mesothelioma.
- e170** **Commentary:** One nano-step for murinekind, one giant leap for mesothelioma
Jordan S. Dutcher, BS, and Jonathan D’Cunha, MD, PhD, Phoenix, Ariz
 We review a well-executed study evaluating the increased efficacy and improved survival of nanoparticle-targeted drug delivery in a murine mesothelioma model.
- e173** **Commentary:** Go small or go home
Anthony W. Kim, MD, and Usman Ahmad, MD, Los Angeles, Calif, and Cleveland, Ohio
 The benefits of nanoparticle therapy observed in the murine model of malignant pleural mesothelioma are both pioneering and foundational.

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Thoracic: Lung Cancer: Letters to the Editor

- e175 Robotic or thoracoscopic segmentectomy: Each complements the other**
Yajie Zhang, MD, PhD, Xiang Chen, MD, and Hecheng Li, MD, PhD, Shanghai, China
- e176 Reply: Robotic-assisted segmentectomy: doing it simply because we can?**
Kimberly J. Song, MD, and Raja M. Flores, MD, New York, NY
- e176 The “multispecialty clinic”: Toward a new paradigm in thoracic oncology?**
George Rakovich, MD, and Alexis Bujold, MD, Montreal, Quebec, Canada
- e177 Reply: Providing an honest perspective on creating a new treatment model**
Melanie P. Subramanian, MD, MPH, St Louis, Mo
- e177 Reply from authors: The many benefits of a multidisciplinary evaluation of lung nodules**
Maria Lucia Madariaga, MD, and Henning A. Gaissert, MD, Chicago, Ill, and Boston, Mass

Thoracic: Esophagus: Invited Expert Opinion

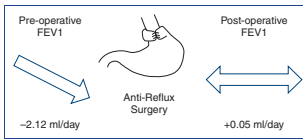


854 Life in a world with per oral endoscopic myotomy: The ever-changing landscape in management of achalasia

Siva Raja, MD, PhD, and Sudish C. Murthy, MD, PhD, Cleveland, Ohio

POEM seems to be a more effective tool in treating achalasia than pneumatic dilation. But is it as good as a minimally invasive Heller myotomy?

Thoracic: Lung Transplant



858 Fundoplication to preserve allograft function after lung transplant: Systematic review and meta-analysis

Joseph R. Davidson, MBBS, MRCS, Danielle Franklin, MBBS, Sacheen Kumar, PhD, FRCS, Borzoueh Mohammadi, MBBS, FRCS, Khaled Dawas, MD, FRCS, Simon Eaton, PhD, Joe Curry, MBBS, FRCS, Paolo De Coppi, PhD, FRCS, and Nima Abbassi-Ghadi, PhD, FRCS, London and Guildford, United Kingdom



In this meta-analysis of patients with lung transplant undergoing antireflux surgery (ARS), the decline observed in rate of change of the FEV₁ can be shown to plateau, which may be indicative of a reduction of the influence of BOS.

867 Commentary: The heartburn of lung transplantation

Ross M. Bremner, MD, PhD, Phoenix, Ariz

Posttransplant fundoplication in patients with gastroesophageal reflux disease may help to protect the transplanted lungs from rejection.

868 Commentary: Gastroesophageal reflux and lung allograft dysfunction: Need to improve detection and clinical reporting

Usman Ahmad, MD, and Charles R. Lane, MD, Cleveland, Ohio

GERD can be multifactorial and needs to be studied in the context of esophageal and gastric motility disorders that are common after lung transplantation. In addition, identification of biochemical markers of gastric content aspiration in BAL fluid will help in the study of reflux and measuring efficacy of its treatment.

869 Commentary: The burning questions of reflux management in lung transplantation

Hai Salfity, MD, MPH, and Matthew Hartwig, MD, Durham, NC

Surgical management of gastroesophageal reflux disease may prolong allograft function in lung transplant patients.

Thoracic: Education: A Young Surgeon’s Note



871 Thirty-three, zero, nine



Caleb R. Matthews, MD, and Phillip J. Hess, MD, Indianapolis, Ind

Disclosing difficult prognosis is an unfortunate obligation all physicians face and is not without consequences. How do we maintain patient autonomy while preserving non-maleficence?

876 Commentary: The audacity of hope
Brendon M. Stiles, MD, New York, NY

Although it is important to honestly discuss prognosis with our patients, it is just as important to provide them with hope.

877 Commentary: Failing to forecast
Jinny S. Ha, MD, and Christopher R. Johnson, MD, Baltimore, Md

Discussing prognosis with a patient is a difficult and delicate task. Strategies and guidelines are needed to better equip physicians to address prognosis in a meaningful and therapeutic manner.

878 Commentary: Injecting hope without making false promises
Linda W. Martin, MD, MPH, FACS, Charlottesville, Va

It is part of our job as thoracic surgeons to discuss prognosis with our patients. We must strive for the delicate balance of realistic hopefulness and be thoughtful about how we deliver difficult information.

Announcements

The American Association for Thoracic Surgery



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880 *Applications for WTSA Membership*

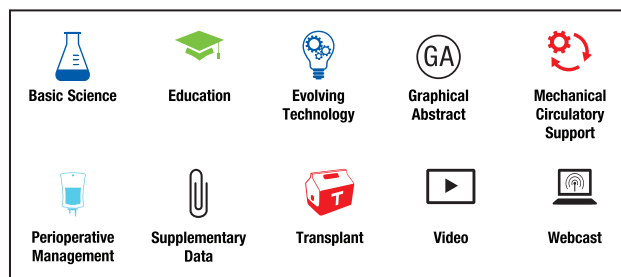
881 *WTSA Traveling Fellowship for Residents, Trainees, and Practicing Surgeons*

The American Board of Thoracic Surgery



881 *ABTS Announcement*

882 *ABTS Requirements for the 10-Year Milestone for Maintenance of Certification*



The Journal of Thoracic and Cardiovascular Surgery online is sponsored by St. Jude Medical.

Cover Photographs

Left (Adult): From Handmade Fenestrated Stent Grafts to Preserve All Supra-Aortic Branches in Thoracic Endovascular Aortic Repair. This study showed the feasibility and efficacy of this technique in treating various aortic pathologies despite this study being a small case series. Demonstration of a 58-year-old male patient with chronic type B aortic dissection and aneurysmal change of the aortic arch and descending aorta who was treated with TEVAR is representative of this technique.

Center (Congenital): From Aortic Uncrossing and Tracheobronchopexy Corrects Tracheal Compression and Tracheobronchomalacia Associated With Circumflex Aortic Arch: Aortic Uncrossing & Tracheopexy. The circumflex aorta (Ao) was transected and anastomosed to the ascending Ao

on the same side of the airway as the descending Ao (aortic uncrossing). The esophagus was rotated to the right side (rotational esophagoplasty). The posterior tracheal membrane with severe dynamic intrusion was fixed to the anterior longitudinal ligament of the spine (posterior tracheopexy). Left, Anterior view. Right, Lateral view. PA, Pulmonary artery.

Right (Thoracic): Robotic Sleeve Lobectomy for Centrally Located Non-Small Cell Lung Cancer: A Propensity Score-Weighted Comparison With Thoracoscopic and Open Surgery. Comparing with VATS and open surgery by using propensity matching, robotic sleeve lobectomy seemed to be a safe, feasible, and effective procedure with a similar oncologic survival for centrally located non-small cell lung cancer. VATS, Video-assisted thoracic surgery.