Farewell editorial

Richard D. Weisel, MD, FRCSC

This Editorial is written to thank the editors, Editorial Board members, and reviewers who contributed to the success of the American Association for Thoracic Surgery (AATS) journals over the past 7 years. Their participation and dedication have been amazing. This Farewell Editorial outlines the changes that were made to the journals with their support.

PRESENTATION TO THE READERS

As was outlined in the “Inaugural Editorial: Communication,”¹ the mission of the *Journal* is advancing excellence and impact on the specialty. The goal was to provide the highest-quality articles to the readers when they want it and in the format they can easily use.

The presentation of the articles in the *Journal* was modified to ensure that the readers could easily appreciate the value of each contribution.²⁻⁵ We added a Central Picture, Central Message, and Perspective Statement on the first page and have now included a Graphical Abstract and a video for nearly every article. Video abstracts are also becoming common. We introduced a consistent color scheme for all figures and tables in the *Journal*. Figure 1 illustrates the first page of articles in 2014 and 2020. Although the majority of our readers access the articles electronically, a minority only read the print version. Therefore, each article also has a QR code so that the readers can use their smartphones to access the videos and other electronic information that accompany each article.³

Most cardiothoracic surgeons devote most of their efforts to 1 of the 3 subspecialties. Readers concentrate on their subspecialty and then browse interesting titles in the other subspecialties. Therefore, a major change made to the *Journal* was to divide the contents into 1 of the 3 subspecialties: Adult (cardiac), Congenital (cardiac), and (general) Thoracic. Each article was placed into one of the subsections based on the subspecialty of the authors. However, some subsections of the *Journal*

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CENTRAL MESSAGE

This Farewell Editorial is dedicated to the editors, editorial board, reviewers and staff who contributed to the changes made and the success of the AATS Journals over the past 7 years.

have overlap among the 3 subspecialties (particularly Mechanical Circulatory Support, Transplantation, Basic Science, Perioperative Management, and Education). The *Journal* therefore added logos with each article that specify these subsections and allow interested readers to easily find articles in their areas of interest in the table of contents.⁵ Because of the support for this change from the *Journal* readership, the same division of the articles was accomplished in the other AATS Journals: *Seminars*, *Operative Techniques*, *JTCVS Techniques*, and *JTCVS Open*.

The new look and feel of the AATS Journals are consistent with the new AATS website and the other organizational communiqués. The goal of the change in presentation is to provide our material in the format our readers can easily appreciate.

REVIEWERS

To publish the highest-quality articles requires the support of the authors and outstanding reviewers. The *Journal* provides new knowledge that will impact clinical practice immediately or some day in the future. However, the innovations must be adequately peer reviewed and the conclusions of each article must be supported by the results presented. An exceptional peer review is required to identify the value of each contribution and to revise each article

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The *Journal* policy requires editors and reviewers to disclose conflicts of interest and to decline handling or reviewing manuscripts for which they may have a conflict of interest. The editors and reviewers of this article have no conflicts of interest.

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ACQUIRED CARDIOVASCULAR DISEASE

Moderate mitral regurgitation in aortic root replacement surgery: Comparing mitral repair with no mitral repair

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Objectives: Patients often present for aortic root replacement surgery with concomitant mitral valve pathology. Moderate mitral regurgitation is the point of clinical equipoise where the benefits of intervention compared with observation are currently unknown. This study compares outcomes in patients undergoing aortic root replacement surgery who did or did not receive a mitral valve repair for their preoperative moderate mitral regurgitation.

Methods: A total of 1316 patients who underwent aortic root replacement surgery between 2000 and 2011 were evaluated, with 104 patients meeting the inclusion criteria by presenting with moderate preoperative mitral regurgitation. A total of 73 patients (70%) received no mitral intervention, and 31 patients (30%) received a mitral repair. Patients underwent preoperative, postoperative, and greater than 6-month follow-up echocardiograms. Average clinical follow-up was 6.5 years.

Results: The mitral repair group had increased preoperative New York Heart Association III/IV and heart failure, longer cross-clamp times, and more postoperative renal failure ($P = .0003$, $P = .04$, $P < .0001$, and $P = .03$, respectively). The improvement in mitral regurgitation was greater for the mitral repair group (-2.1 ± 0.3 vs -1.1 ± 0.8 , $P < .0001$), and mitral regurgitation remained significantly lower on follow-up at 6 months or more (0.6 ± 0.4 vs 0.9 ± 0.2 , $P = .002$). A significantly greater percentage of patients undergoing mitral repair compared with patients with no repair had improvement of at least 1 grade in mitral regurgitation postoperatively (100% vs 70%, $P = .001$) and on follow-up at 6 months or more (90% vs 61%, $P = .006$). There was no difference in long-term survival, freedom from 2+ or greater mitral regurgitation, or mitral reinterventions.

Conclusions: Mitral repair along with aortic root replacement has acceptable operative risk. Aortic root replacement surgery alone improved mitral regurgitation, but the addition of mitral repair further reduced mitral regurgitation, suggesting that repairing moderate mitral regurgitation should generally be considered along with aortic root replacement. (J Thorac Cardiovasc Surg 2014;147:938-41)

Patients frequently present with both aortic and mitral valve pathology. In published series of aortic valve replacement (AVR), as many as 61% to 90% of patients have some degree of mitral regurgitation (MR).¹ Patients undergoing aortic root replacements also frequently present with MR because many of the degenerative diseases of the aortic

for MR, mitral valve repairs are likely more beneficial than mitral valve replacements.² Clinical equipoise still exists whether the conservative approach of observation or the interventional approach of mitral repair is best for patients with moderate MR undergoing aortic valve intervention. This study compares echocardiographic and

CDY

ADULT

ADULT: AORTIC VALVE

A progress report on reimplantation of the aortic valve

Check for updates

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ABSTRACT

Objective: To examine the late outcomes of reimplantation of the aortic valve (RAV) in patients followed prospectively since surgery.

Methods: All 465 patients who had RAV from 1989 to 2018 were followed prospectively with periodic clinical and echocardiographic assessments. Mean follow-up was 10 ± 6 years and 98% complete.

Results: Patients' mean age was 47 ± 5 years, and 78% were men. The aortic root aneurysm was associated with Marfan syndrome in 164 patients, Loeys-Dietz syndrome in 13, bicuspid aortic valve (BAV) in 67, and type A aortic dissection in 33. Aortic insufficiency (AI) was greater than mild in 298 patients. Concomitant procedures were performed in 105 patients. There were 5 operative and 51 late deaths. At 20 years, 69% of patients were alive and free from aortic valve reoperation, and the cumulative probability of aortic valve reoperation with death as a competing risk was 6.0%, and the cumulative probability of developing moderate or severe AI was 10.2%. Only time per 1-year interval was associated with the development of postoperative AI by multivariable analysis (hazard ratio, 1.04; 95% confidence interval, 1.02-1.10; $P = .006$). Gradients across preserved BAV increased in 5 patients, and 1 required reoperation for aortic stenosis. Distal aortic dissections occurred in 22 patients, primarily in those with associated genetic syndromes.

Conclusions: RAV provides excellent long-term results, but there is a progressive rate of AI over time, and patients with BAV may develop aortic stenosis. Patients with genetic syndromes have a risk of distal aortic dissections. Continued surveillance after RAV is necessary. (J Thorac Cardiovasc Surg 2021;161:90-99)

CENTRAL MESSAGE

Reimplantation of the aortic valve to treat patients with aortic root aneurysm provides excellent long-term results with slow but progressive aortic valve dysfunction.

PERSPECTIVE

This study provides new insights on late outcomes after reimplantation of the aortic valve. Aortic valve function deteriorates slowly over the years and it may be worse in patients with bicuspid aortic valves. Furthermore, there is a risk of distal aortic dissections in patients with associated genetic syndromes and continued surveillance is necessary.

See Commentaries on pages 900, 901, and 903.

FIGURE 1. The first page of an article from March 2014 is on the left, and an article from July 2020 is on the right. Every original article now includes a Central Picture, Central Message, and Perspective Statement. More than 85% of articles include Graphical Abstracts and videos, and have QR codes to provide print readers with immediate access to supplementary online material.

to optimize its value for our readers. The significance of each published article should be placed in the context of advances in the field, and the relevance of the findings should be clearly identified for cardiothoracic surgeons. To select the best contributions for publication requires excellent reviews from experts. Over the past 7 years, we have recruited exceptional editors and reviewers who have dedicated their time and effort to selecting and modifying the best material for publication. However, we have also focused on the author's experience. Too much criticism is nearly as bad as too little criticism. We strived to strike the right balance, which at times, has been difficult. However, with the support of our reviewers and editors, we have modified the process to provide quality reviews delivered in the shortest time possible.

To obtain the highest-quality reviews in a timely manner requires a large number of exceptionally capable and dedicated reviewers. First, we needed to establish the criteria for reviewer performance and then ensure that our editors and reviewers were well versed in these criteria. After extensive discussion, we agreed on a set of criteria for reviewer performance that was published in an article prepared by our editors⁶ and is available on page 44 of our "Information for Authors" (<https://aats.blob.core.windows.net/media/Publications/JTCVS%20Information%20for%20Authors%20Updated%2004.28.21.docx>). As stated in the article: "Exceptional reviews provide the editor and authors clear, concise, insightful, and constructive feedback, which accurately reflects manuscript strengths and weaknesses. They also provide specific recommendations for revisions that should significantly improve the manuscript" (p 1610).⁶

Next, we established a process to evaluate each reviewer's performance and provide this information to both the reviewers and the editors. Each reviewer receives a yearly performance evaluation including a score for the quality of their reviews and the number of reviews that were submitted on time. The editors receive an update on reviewer performance every 6 months so they can invite reviewers who received high scores and submitted their reviews on time. The criteria for appointment to the Editorial Board are listed in the "Information for Authors" (link above, on page 45).

As the number of submissions increased, we expanded the number of editors and the Editorial Board to ensure that none of the excellent reviewers or editors were overloaded. Performance evaluations are very helpful to identify the best reviewers, but additional inducements are necessary to ensure excellent reviews. Performance-based appointments to the Editorial Board are one inducement, and invitations to the best reviewers to provide Commentaries are another incentive. In addition, Commentaries provide the readers with an expert indication of the value of the article to the field. Weekly performance evaluations of the editors also provide them with an incentive to invite reviewers who will provide high-quality reviews quickly.

STATISTICAL REVIEWS

As outlined in our 2014 Editorial,⁷ the conclusions of each article must be supported by an appropriate statistical analysis. Statistical evaluation has become a subspecialty that requires exceptional expertise. We are very fortunate to have Dr Eugene Blackstone as the Statistical Editor. He

has extensive experience in statistical methods and has worked with leaders in all 3 of our subspecialties. He assisted in the creation of our statistical review process. Our “Information for Authors” (link above; see statistical section on pages 38-39) states that authors are requested to collaborate with individuals who have expertise in scientific methods and statistics to ensure adequate and appropriate study design, analysis, interpretation, and reporting. To assist authors in finding the most appropriate statistical analysis, we have recruited a cadre of individuals with training and experience in study design and statistical methodology. Working together with the authors’ statistical consultants, the statistical editors and reviewers ensure that the conclusions of each article are supported by an appropriate statistical analysis. Our statistical editors have published a series of articles to guide our readers and authors in this rapidly changing field. These articles are published in the *Journal* under “Statistics for Surgeons.”

With the increasing number of submissions, we have expanded the number of statistical editors and reviewers. Most of the newly appointed individuals are surgeon scientists with advanced degrees who have an in-depth understanding of both the clinical problems and the appropriate statistical approaches. In addition, we have included PhD statisticians who work closely with cardiothoracic surgeons to provide additional support for the process. The 2 levels (statistical reviewers and statistical editors) ensure that only important statistical considerations dominate the requests to the authors and that unimportant considerations do not delay publication of important articles. The performance of the statistical reviewers and statistical editors is evaluated each week to optimize our responses to authors. The contributions of this group have improved the quality of the published articles and raised the level of scholarship in cardiothoracic surgery.

AUTHOR EXPERIENCE

Extensive efforts have been expended to provide outstanding clinical and statistical reviews intended to produce the best article possible for the authors and our readers. The result is frequently a request for extensive revisions and occasionally conflicting recommendations from the reviewers. To improve the author’s experience, the editors now provide the authors with statements indicating the revisions necessary for acceptance of the article. The editors now limit the number of reviewers, but still provide sufficient expertise to accurately evaluate the science. The editors work with the authors to improve their contribution as expeditiously as possible. We have expanded the number of editors to ensure that we provide the best review in the shortest time possible. We now provide authors with our first decision in 18 days. For articles that receive a revised decision and have a statistical evaluation, the average is

38 days. The masthead of editors and editorial board reviewers can be found here: <https://els-jbs-prod-cdn.jbs.elsevierhealth.com/pb/assets/raw/Health%20Advance/journals/ymtc/editorial-board.pdf>.

COMMENTARIES

Because only high-quality articles are accepted for publication, we provide our readers with the reasons for selecting each article and what impact we anticipate the information will have on the field. Authors are asked to explain the importance of their observations to our readers in the Perspective Statement included with full-length articles, and we also publish 1 (or more) Commentary with each article. The Commentaries are intended to explain why the article was chosen for publication, emphasize the strengths and weaknesses of the article, and indicate how the article can be used by cardiothoracic surgeons in their practice. The Commentaries indicate the place of each article in the field by recognized experts. Also, importantly, the Commentaries provide a reward for our best reviewers.

INVITED EXPERT OPINION ARTICLES

The goal of the *Journal* is to provide readers with the latest information available in each subspecialty. To accomplish this goal, we recruited a large group of Feature Editors in each subspecialty and asked them to carefully review the literature for new developments that would be of interest to our readers. Each proposal for an Invited Expert Opinion is reviewed by the Feature and Associate Editors who approve each project and propose potential authors to invite. The Feature Editor writes a brief introduction to the Invited Expert Opinion explaining why the topic and authors were selected and why the topic is important to cardiothoracic surgery.

EXPANSION OF AMERICAN ASSOCIATION FOR THORACIC SURGERY JOURNAL FAMILY

Submissions to the *Journal* have grown significantly over the past 7 years. Likewise, the number of abstracts presented at the AATS Annual Meetings increased. As a result, the *Journal* receives more high-quality articles than we can publish.

In 2015, in response to the growing number of submissions, we initiated a transfer program to *Seminars in Thoracic and Cardiovascular Surgery*. The editors and reviewers identified articles for transfer to *Seminars* that provided important new information and whose methods and analytic approach were acceptable, yet the article was believed to have insufficient impact for the *Journal*. Initially, authors were reluctant to accept transfer. However, the process has been streamlined so that no further modifications are necessary for publication after the extensive review by the *Journal* and *Seminars* editors. Now, the author only needs to accept transfer and the article will be

published online in *Seminars* and appear in PubMed within weeks. This facilitated transfer model has become accepted by authors, and *Seminars* has published many high-quality, transferred, full-length manuscripts. In 2020, *Seminars* debuted an Impact Factor of 2.1.

Although subscription journals are the standard in medical publishing, changes in the business model as well as requests from some funding agencies and institutions have led to the need for open access publications. After extensive discussions, the AATS decided to move in that direction, and 2 new open access journals, *JTCVS Techniques* and *JTCVS Open*, were added to the AATS publication family. We use the same approach as we do with *Seminars*. After extensive review and revision requested by the *Journal* editors, the authors only need to accept transfer and the article will be published online and freely available worldwide within weeks. So far, we have transferred a large number of articles to these new open access journals.⁸ The articles published in these new journals are extensively viewed, downloaded, and cited. *JTCVS Techniques* has been accepted for indexing in PubMed and by Clarivate to receive an Impact Factor in 2023. These new journals permit us to publish many more innovative submissions that did not achieve sufficient priority for the *Journal*.

WHAT TO READ?

Each day our inboxes are filled with new articles published in our field that might be of interest to us. However, how do we determine what to read? The *Journal* now provides our readers with suggestions on the top 10 best articles in many topics in each subspecialty.⁹ The Feature Editors have carefully reviewed all of the articles published in the AATS Journals as well as those published in other high-impact publications to provide our readers with a curated list of the top articles. Each review is accompanied by an illustrated bibliography with the Central Picture and Central Message of the articles highlighted, and readers can access these articles directly from the bibliography with one click. These Invited Expert Reviews, Invited Expert Technical Reviews, and Invited Year in Review articles are short and do not follow the Preferred Reporting Items for Systematic Reviews and Meta-Analyses guidelines, but provide the readers with expert opinions in a format that is easily understood and the articles are easily accessed.

In addition, the AATS now sends to all members and interested readers bimonthly email alerts about featured articles in topics of interest to each subspecialty. The bimonthly email alerts feature the Central Picture and

Central Message or Graphical Abstract and provide 1-click access to the article.

Finally, the Thoracic Surgery Social Media Network and the AATS Journals tweet about featured articles in the *Journal* each month. The result of these innovations is an increasing number of citations and a higher impact factor, as well as more submissions, views, and downloads.

CONCLUSIONS

As predicted in the Inaugural Editorial,¹ communication has changed, and cardiothoracic surgeons now have many more opportunities to view important innovations in their subspecialty each day. The *Journal* has changed with the communications revolution and is now well situated to provide the readers with what they want, when they want it (now), and in a format that they can appreciate. Dr Alec Patterson, the new Editor for AATS Publications, will continue the transformation and will be able to capitalize on the new platforms that have been created. I look forward to watching for more changes in the years to come.

The author thanks Spencer McGrath, Managing Editor, and Lindsay Dankmyer, Editorial Assistant, for their help with this editorial and their extraordinary contributions to the success of the AATS publications. The author also thanks the large number of staff of AATS publications who dedicated the hours required to publish the *Journal* and to complete the transition to the 6 AATS journals over the past 7 years.

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