



State of the Art in Pericardial Disease

ISSUE INTRODUCTION

MAAN MALAHFJI, MD 

HOUSTON
Methodist
DEBAKEY HEART &
VASCULAR CENTER

There has been a paradigm shift in the care of patients with pericardial disease, as recently emphasized in the new American College of Cardiology Guidance document and European Society of Cardiology Guidelines, and so I was thankful to the *Methodist DeBakey Cardiovascular Journal* editorial leadership for highlighting this timely topic. Unfortunately, many patients with pericardial disease continue to slip past clinical detection algorithms, with some being diagnosed or referred to pericardial centers only at advanced stages or after prolonged suffering. The past 10 years have seen much-needed progress, including refining diagnosis using cardiac magnetic resonance imaging (MRI), new therapeutics for relapsing pericarditis, and further understanding of the full spectrum and optimal medical and surgical management of constrictive pericarditis.

This issue of the *Methodist DeBakey Cardiovascular Journal* aims to comprehensively discuss most, if not all, aspects of pericardial disease for clinicians, covering the latest advances in diagnostics and therapeutics as well as highlighting the unknowns in pericardial disease (there are many still). We are lucky to have leading authorities on this topic weigh in, many of whom have led the most impactful clinical trials and studies in pericardial disease. We also cover “special topics” that tend to get less emphasis, including the role of exercise and exercise restriction, pericarditis in patients with autoimmune disease, and medical therapy for constrictive pericarditis.

We begin with one of the most important and challenging pericardial conditions: relapsing pericarditis. In their review titled “Mechanistic Insights and Emerging Therapeutic Strategies in Recurrent Pericarditis,” Drs. Mohammad Alqahtani, Allan Klein, and Tom Kai Ming Wang present the current understanding of the mechanisms of relapsing pericarditis, how cardiac MRI has revolutionized its management, and the latest therapeutic advancements of recurrent pericarditis. This group of patients has received enhanced attention, with numerous ongoing Phase II and III clinical trials targeting the NLRP3 inflammasome implicated in relapsing pericarditis.

In “Relapsing Pericarditis: Prediction of Relapses, Risk Scores, and Role of Exercise Restriction,” Drs. Joseph El Roumi and Tom Kai Ming Wang further expand on the topic of relapsing pericarditis, focusing on the prediction of relapse, which has made much progress with the Klein score and others. They also discuss the role of exercise restriction in pericarditis, an area where more research is certainly needed to guide our conversations with patients.

CORRESPONDING AUTHOR:

Maan Malahfji, MD

Houston Methodist DeBakey
Heart & Vascular Center,
Houston Methodist, Houston,
Texas, USA

mmalahfji@houstonmethodist.org

KEYWORDS:

pericardial disease; relapsing
pericarditis; post-cardiotomy
syndrome; constrictive
pericarditis; pericardial
inflammation

TO CITE THIS ARTICLE:

Malahfji M. State of the Art in
Pericardial Disease. *Methodist
DeBakey Cardiovasc J*.
2026;22(2):1-3. doi: [10.14797/
mdcvj.1805](https://doi.org/10.14797/mdcvj.1805)

The issue then turns to post cardiac injury syndrome (PCIS) in a review titled “Evaluation and Management of Post-Cardiotomy Syndrome” by Drs. Massimo Imazio and Mariacristina Tomat. PCIS is increasingly prevalent and a frequent cause of repeat hospitalizations, increased healthcare costs, and patient distress. Prevention and optimal management of PCIS are key considerations for the next decade, particularly as cardiac procedures continue to expand in indications and grow in numbers.

Accurate diagnosis of pericarditis and constrictive pericarditis remains a challenge. In the next paper, “Role of Cardiac MRI and CT in Pericarditis and Pericardial Constriction,” Drs. Kazim Baser, Nisha Ali, and I discuss the use of multimodality imaging, including cardiac MRI cardiac computed tomography (CT), and cardiac positron emission tomography in the evaluation of pericardial inflammation and constrictive physiology. We also review specific protocols and nuances of interpretation, which tends to be more challenging in these patients. Cardiac MRI is now recommended in the guidelines for many patients with pericardial disease, and appropriate utilization and interpretation is key for advancing patient care.

In the next review, “Pericarditis in Patients with Autoimmune Disease: Insights into Prevalence and Optimal Management,” Drs. Yeva Fakikh, Sara Kazzaz, and I discuss another aspect of pericardial disease: pericarditis associated with autoimmune disease. This group of patients deserves increased attention as they are often excluded from clinical trials of new therapeutics. They are also quite heterogeneous, and our understanding of disease mechanisms remains limited. Further collaboration among rheumatologists, cardiologists, scientists, and industry is much needed to achieve progress in this area.

We then transition to discussing pericardial effusion and constrictive pericarditis. In their review “Role of Multimodal Cardiac Imaging in Pericardial Effusions and Tamponade,” Drs. Rohan Gajjar, Tahir Kafil, and Sushil Allen Luis start by focusing on echocardiographic evaluation of pericardial effusion and tamponade. They then review the echocardiographic evaluation as well as the ancillary role of cardiac CT and cardiac MRI to evaluate patients with pericardial effusion.

Perhaps one of the most challenging conditions to evaluate (and to not miss), is constrictive pericarditis, a condition with unique hemodynamic manifestations. In their review titled “Hemodynamics of Pericardial Constriction: Role of Echocardiography and Cardiac Catheterization,”

Drs. David Harmon and Jae Oh offer a comprehensive review of constrictive pericarditis, discussing its hemodynamics, findings on echocardiography, and cardiac catheterization. Readers wanting to understand constrictive pericarditis are well served by this review.

Effusive constrictive pericarditis is another condition that warrants close attention as it exists along a spectrum of pericardial inflammation and fibrosis, with transient CP representing an early, reversible stage. In their review, “Constrictive Pericarditis and Effusive Constrictive Pericarditis: Is There a Role for Medical Therapy?” Drs. Lamis El Harake, Mohamed Al-Kazaz, and Paul Cremer discuss the full spectrum of inflammatory constrictive disease, covering the potential role of medical therapy prior to considering surgery for constrictive pericarditis.

Next, “Perioperative and Surgical Management of Constrictive Pericarditis” by Drs. Lamis El Harake, Mohamed Al-Kazaz, Paul Cremer, and Douglas Johnston addresses contemporary best practices for the surgical management of constrictive pericarditis. Surgery for pericardial constriction can be a routine operation at high volume experienced centers or uncommonly performed at other hospitals. Medical optimization and timely referral to surgery are perhaps the most important aspects to achieve excellent results for these patients. Conversely, delayed diagnosis and coexisting comorbidities can negatively affect what otherwise could be a curative operation.

Finally, in our “Points to Remember” column on “Malignant Pericardial Effusion: Heart-breaking Tumors,” Dr. Mohammed Chamsi-Pasha provides an overview of the common entity of malignant pericardial effusion. This is another situation where collaboration of cardiology, cardiac surgery, and oncology is critical to individualize patient care and identify the best pathway for treatment.

In conclusion, I believe the reviews in this issue are clinically relevant and provide the latest evidence on the science and management of pericardial disease. Together, these contributions reflect a field transitioning from reactive care to mechanism-guided, imaging-informed, and increasingly targeted therapy. The topic of pericardial disease is often forgotten, but not in our journal!

GUEST EDITOR BIOGRAPHY

The editorial team of the *Methodist DeBakey Cardiovascular Journal* wishes to express our appreciation to Dr. Maan Malahfji for his expertise, insight, and dedication in curating this issue on pericardial diseases.

MAAN MALAHFJI, MD



Maan Malahfji, MD, is a cardiologist and multimodality cardiac imaging specialist at the Houston Methodist DeBakey Heart & Vascular Center. As assistant professor of cardiology and director of cardiac MRI research, he

leads the pericardial disease clinic at Houston Methodist. Dr. Malahfji graduated from the University of Aleppo, Syria, and completed his internal medicine residency at University of Texas at Houston, followed by cardiology and cardiac imaging fellowships at Houston Methodist Hospital. He has continued to serve as faculty in the Department of Cardiology at Houston Methodist since 2020. His research interests include the use of cardiac imaging in valvular heart disease to guide diagnosis, intervention, and risk stratification.

COMPETING INTERESTS

The author has no competing interests to declare.

AUTHOR AFFILIATIONS

Maan Malahfji, MD  orcid.org/0000-0002-2701-8783

Houston Methodist DeBakey Heart & Vascular Center, Houston Methodist, Houston, Texas, USA

TO CITE THIS ARTICLE:

Malahfji M. State of the Art in Pericardial Disease. *Methodist DeBakey Cardiovasc J*. 2026;22(2):1-3. doi: [10.14797/mdcvj.1805](https://doi.org/10.14797/mdcvj.1805)

Submitted: 11 February 2026 **Accepted:** 11 February 2026 **Published:** 10 March 2026

COPYRIGHT:

© 2026 The Author(s). This is an open-access article distributed under the terms of the Attribution-NonCommercial 4.0 International (CC BY-NC 4.0), which permits unrestricted use, distribution, and reproduction in any noncommercial medium, provided the original author and source are credited. See <https://creativecommons.org/licenses/by-nc/4.0/>.

Methodist DeBakey Cardiovascular Journal is a peer-reviewed open access journal published by Houston Methodist DeBakey Heart & Vascular Center.