

Evolving Concepts in Plaque Characterization



Andreas Flammer
Editor-in-Chief

Dear Readers,

Once again, a new issue of the journal has been printed. Every time I read the articles in the CVM journal, I am proud of how diverse, contemporary, and fascinating the field of cardiovascular medicine is.

In this issue, I would like to highlight the timely state-of-the-art review by Flavio Giuseppe Biccirè and Lorenz Räber on plaque characterization in coronary artery disease. The review article provides an accurate explanation and summary of the evidence of plaque characterization using intravascular ultrasound, optical coherence tomography, and near-infrared spectroscopy, as well as the effect of lipid-lowering therapy on vulnerable plaques. There has been remarkable research progress in this area. The authors emphasize the importance of performing plaque characterization for certain patients in modern catheterization laboratories, as plaque features are associated with future events. Moreover, strict lipid-lowering measures should be implemented, as beneficial changes in plaque characteristics occur shortly after treatment initiation.

The review by Wendt et al. addresses the issue of severe bleeding during or following cardiac surgery in patients on dual antiplatelet therapy.

The potential use of intraoperative hemoadsorption to remove these antithrombotics is considered promising and exciting. The concept, relevant literature, and ongoing evaluation through several major trials are discussed in detail in this review.

This issue also presents several outstanding case reports. Andrea Demarchi's case study explores a recurrent takotsubo syndrome with both brady- and tachyarrhythmic presentations, shedding light on the recurrent nature and diverse arrhythmic patterns of the disease. Another report highlights the arrhythmic potential of cardiomyopathies – Catrina Ribeiro Carvalho presents a case of new-onset heart failure in a patient with a truncated variant of the filamin-C gene. Guan Fu presents an unusual case of a patient exhibiting both focal atrial tachycardia and atypical AV reentrant tachycardia induced and terminated by atrial ectopic beats. Additionally, Ion Vasiloi discusses a case of transcatheter mitral valve implantation in a 77-year-old patient with severe degenerative mitral valve regurgitation and multiple severe comorbidities. Finally, Andreas Andreou describes a case of isolated right ventricular myocardial infarction caused by a spontaneous occlusion of a right ventricular branch.

I hope you enjoy this exciting issue!