



## Introduction to this focused issue on “Current Management Aspects in Adult Congenital Heart Disease (ACHD)”: part II

There are three forces that drive innovation in the field of adult congenital heart disease (ACHD). First, it is the adult himself. He is the “new actor” in the field of congenital heart disease (CHD), and calls us physicians for action. Second, with the arrival of the ACHD in medical care, also “novel medical challenges” have emerged. Finally, with these novel medical challenges, a new generation of innovative researchers and physicians came along.

An account of the steadily increasing need for up-to-date information on the management of ACHD, Prof. Schoenhagen, Editor-in-Chief of the “*Cardiovascular Diagnosis and Therapy*” gave us the opportunity to publish a focused issue on the current management aspects in ACHD in December 2018. During the preparation of the first focused issue, we asked experienced, high-ranking ACHD-specialists from all over the world for one article. We received these, and in addition suggestions for bunches of further contributions, revealing the need for a focused edition part II.

This second issue focuses on “novel challenges” as the second innovation force, in which colleagues present their thoughts and data on novel approaches and solutions in ACHD care. In doing so, we decided not to be very directive when suggesting topics, but rather to give room to let the issue grow through its own dynamics. This approach seems to best represent the areas of ACHD with strongest growth momentum. Innovative imaging techniques already outweigh by far all other areas in terms of quantity:

- ❖ Aboulhosn *et al.* discuss echocardiographic guidance of interventions in ACHD;
- ❖ Huntgeburth *et al.* elucidate the emerging clinical applications of strain imaging and three-dimensional (3D) echocardiography to assess ventricular function;
- ❖ Abdul-Khaliq *et al.* discuss two-dimensional (2D) speckle tracking echocardiography of the abdominal aorta as a novel approach to evaluate arterial stiffness in Turner syndrome;
- ❖ Mebus *et al.* review the non-invasive assessment of liver alterations in Senning and Mustard patients;
- ❖ Aydin *et al.* present their data on age-related clinical and echocardiographic manifestations of aortic valve stenosis in a non-selected, unbiased cohort;
- ❖ Tanase *et al.* report on the implantation of Sapien valves in pulmonary position without pre-stenting;
- ❖ Kheradvar *et al.* discuss the role of artificial intelligence in pediatric and adult congenital cardiac magnetic resonance imaging (MRI), and
- ❖ Nemes *et al.* introduce the CSONGRAD Registry and MAGYAR-Path Study on mitral annulus in adults with repaired tetralogy of Fallot as evaluated by 3D speckle-tracking echocardiography.

Arrhythmia is another emerging issue in ACHD, where Klein *et al.* present a variant panorama in 1,385 index patients and sensitivity of expanded next-generation sequencing panels in arrhythmogenic disorders, and Meyer *et al.* present their experiences on advanced mapping strategies for ablation therapy. In close clinical relation to arrhythmia, there is congenital disease of the myocardium. In this constantly evolving field, Wolf *et al.* offer both an overview of the genetics and clinical perspectives of hypertrophic cardiomyopathy, and data on the long-term outcome of patients with Noonan syndrome compared to sarcomere hypertrophic cardiomyopathy.

Oral health remains a major concern in ACHD, where Folwaczny and Hollatz *et al.* present their data on the awareness of oral health in CHD and remind us of the importance of oral health.

Without any doubt, the comprising clinical assessment of patient status is of great importance. Neidenbach *et al.* present the so far most comprehensive data on the use of hand grip strength as a biomarker in patients with CHD. Kornhuber *et al.* present first data on blood coagulation disorders in patients with Marfan syndrome, a previously underestimated problem.

Preventive medicine, including nutritional and psychological aspects, must also be given increasing attention in CHD as the age of affected patients increases. In this issue, Andonian *et al.* provide a review on overweight and obesity as an emerging problem in ACHD, Obeid *et al.* give us an update on folate supplementation to prevent CHD and low birth weight, and Oberhoffer *et al.* provide us current knowledge about the burden of atherosclerotic disease in ACHD. Zengin-Sahm *et al.* share with us their expertise on pregnancy in ACHD. Finally, Biber *et al.* discuss the current state of research on the

psychological situation of parents of children with CHD.

We hope, that readers will share with us the experience of the driving force of innovation that fuels the field of ACHD. If the joy of reading corresponds to the joy of editing this issue, we look forward to happy readers.

With kind regards from Hamburg and Munich,

Yskert von Kodolitsch (Hamburg) and Harald Kaemmerer (Munich).

## Acknowledgments

None.

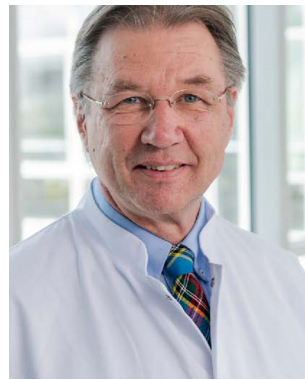
## Footnote

*Conflicts of Interest:* The authors have no conflicts of interest to declare.

*Ethical Statement:* The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.



Yskert von Kodolitsch



Harald Kaemmerer

**Yskert von Kodolitsch, MD, MBA**

*Deutsches Aortenzentrum Hamburg, University Medical Center Hamburg-Eppendorf, Hamburg, Germany.  
(Email: kodolitsch@uke.de)*

**Harald Kaemmerer, MD, VMD**

*Professor of Internal Medicine/Cardiology, Department of Congenital Heart Disease and Pediatric Cardiology,  
German Heart Center Munich, Munich, Germany. (Email: Kaemmerer@dbm.mbn.de)*

doi: 10.21037/cdt.2019.09.18

**View this article at:** <http://dx.doi.org/10.21037/cdt.2019.09.18>

**Cite this article as:** von Kodolitsch Y, Kaemmerer H. Introduction to this focused issue on “Current Management Aspects in Adult Congenital Heart Disease (ACHD)”: part II. *Cardiovasc Diagn Ther* 2019;9(Suppl 2):S185-S186. doi: 10.21037/cdt.2019.09.18