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You can also stay up-to-date with the new lecture series/activities of the Heart University by subscribing to the twitter handle "@heartuni_org."

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Heart University Hosts Historical Event With First Webinar in Series of "Contemporary Questions in Congenital Heart Disease"

Justin T. Tretter, MD and Jonathan D. Windram, BSc (Hons), MBChB, MRCP

It is not hyperbole to state that the first free webinar for the ***Heart University Contemporary Questions in Congenital Heart Disease Webinar Series*** hosted on May 6th, 2020 was a huge success, and in many ways a historical event in our field of Pediatric and Adult Congenital Heart Disease. The live educational event was attended by 1,374 people from 423 institutions, and 100 countries spanning six continents. This was a historical event in that it represents the largest gathering, albeit virtual, of congenital heart disease providers for which we are aware of outside of the Quadrennial World Congress of Pediatric Cardiology and Cardiac Surgery. Every form of provider involved in the care of both children and adults was represented; from trainees, to nurses, allied health care professionals, anesthesiologists, congenital heart surgeons, to adult congenital and pediatric cardiologists.

The first webinar covered the topic of ***Tetralogy of Fallot: How Can we avoid poor outcomes late after repair?*** (**Figure 1**) To listen to the webinar in its entirety, please visit **www.heartuniversity.org** or go directly to the listing of each lecture **here**.

Webinar Moderators

Justin T. Tretter, MD, Cincinnati Children's Hospital Medical Center
Jonathan D. Windram, MBChB, University of Alberta Hospital

A poll was conducted at the beginning of the survey asking the following question:

Which cutoff values do you mostly commonly use at your institution to help guide timing for pulmonary valve replacement guidelines in patients with repaired Tetralogy of Fallot?

A. RVEDVi >170 mL/m2, ≥moderate RV systolic dysfunction, RV systolic pressure ≥2/3 systemic pressure, free pulmonary regurgitation
B. RVEDVi >160 mL/m2, progressive RV systolic dysfunction, severe RVOT obstruction, free pulmonary regurgitation
C. RVEDVi >150 mL/m2, RVESVi >80 mL/m2, RV ejection fraction <47%, RV systolic pressure ≥2/3 systemic pressure, free pulmonary regurgitation
D. Other cutoffs not listed

Of the 446 participants who answered the question, 65 (15%) answered "A" which are the cutoffs proposed by Canadian Cardiovascular Society, 1). 92 (21%) answered "B" which are the

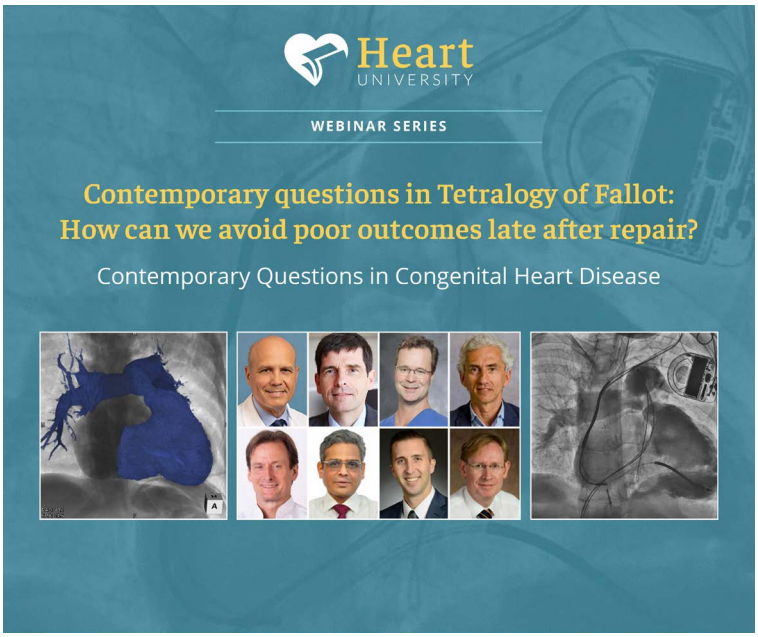

FIGURE 1 *Tetralogy of Fallot: How can we avoid poor outcomes late after repair?*

cutoffs proposed by European Society for Cardiology, 2). 210 (47%) answered "C" which are the cutoffs proposed by Tal Geva, 3). 10 (2%) answered that their institution uses other cutoffs which are not listed, and 69 (15%) were unsure of what cutoffs are used at their institution. So clearly there remains wide variation in the cutoffs used to guide timing of pulmonary valve replacement.

The highlight of the webinar was the contemporary and somewhat contentious questions forming the basis for the six presentations, along with the clear expertise and excellent insight provider by the six panelists.

Presentation Topics and Presenters

"Is annulus-sparing worth the effort?" – Glenn Van Arsdell, MD, University of California – Los Angeles, Mattel Children's Hospital

"Have the guidelines for PVR got it all wrong?" – Andrew Redington, MD, Cincinnati Children's Hospital Medical Center

"Endocarditis: should we abandon the Melody valve?" – Doff B. McElhinney, MD, Lucile Packard Children's Hospital at Stanford

"Why do we do echo's anymore?" – Luc Mertens, MD, PhD, The Hospital for Sick Children in Toronto

"Who should get an EP study/ICD?" – Nico Blom, MD, Center for Congenital Heart Disease Amsterdam-Leiden

"What if I can't afford an MRI machine?" – Krishna Kumar, MD, DM, FAHA, Amrita Institute of Medical Sciences and Research Centre

While those attending the lecture were surely updated on the contemporary understanding of best practice in the management of patients with tetralogy of Fallot, the discussions also set the framework for future research focus in this population. As the presentations progressed from discussing what may be the best initial complete repair, to the flawed nature of current guidelines for timing of pulmonary valve replacement, towards interpreting the limited data on risk for endocarditis following transcatheter pulmonary valve replacement, the crucial role of echocardiography as the primary imaging modality, and a controversial "substrate tailored approach" to individualized risk stratification of patients with repaired tetralogy of Fallot, it was the last presentation which seemed to resonate most with the global audience. Dr. Krishna Kumar discussed the additional challenges faced when managing patients with tetralogy of Fallot in a limited resource setting, where amongst other facets, the clinician and patient must put deeper thought into the lack of demonstrated survival benefit following pulmonary valve replacement despite suggested thresholds to guide timing. This presentation not only benefited those practicing in resource limited settings, but also raised thought provoking questions to those practicing in settings where limitation of resources is not as much of a barrier.

We thank the panelists and live audience for making this first *Heart University* webinar a success and look forward to continuing along this exciting *Heart University* webinar series.

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