IMMREVIEW

MAY 2016 I NEWSLETTER #19

INTRACARDIAC ULTRASOUND AT IMMR

Procedural guidance from the inside!







Ultrasound is one of the pillars on which structural heart therapies have thrived over the past few years. At IMMR, we have tried to stay at the forefront of innovative imaging and we can do any kind of ultrasound application for cardiovascular visualization. Transthoracic (TTE), trans-esophageal (TEE), epicardic, transdiaphragmatic, and intracardiac. For intracardiac ultrasound, we were using, off label, the pediatric transesophageal probe by Philips advanced through the very large jugular of sheep all the way to the right atrium. We now have acquired our own dedicated 9-Fr compatible system of intracardiac echo, the Zonare by St JUDE, and find the imaging particularly crisp and insightful.

Intracardiac ultrasound _

This imaging modality can be used for structural heart, EP, and can be used in a variety of applications. It is truthfully another tool in the box, in order to better approach anatomy and therefore allow both assessment and guiding in areas where traditional ultrasound is suboptimal. A transseptal approach through the fossa ovalis can be performed safely and efficiently in a few minutes. Visualization of the mitral valve transversely can be done easily without having the operator's hands in the field so intracardiac echo can also be a relevant solution to unwanted scattered x-rays for the interventionalist or surgeon.



Nicolas Borenstein, PhD Scientific and technical manager IMMR



ViewMate Z

The ViewMate Z Intracardiac Ultrasound Console provides a full complement of ultrasound capabilities in a small, cart-based system. The software based ultrasound console features Zone Sonography for acquisition of diagnostic ultrasound images.

Product Highlights

- Two-Dimensional (2-D), high resolution imaging of cardiac structures
- Color Flow Doppler imaging for real-time assessment of blood flow direction
- Pulsed and Continuous Wave Spectral Doppler for quantification of blood flow
- M-Mode imaging and graphic display of temporal events
- Expandable for Transthoracic, Transesophageal, and Vascular imaging



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Current interventional procedures in structural heart disease and cardiac arrhythmias in humans require peri-interventional echocardiographic monitoring and guidance. Intracardiac echocardiography (ICE) complements and has in part replaced transoesophageal echocardiography for some specific procedures. Indeed, intracardiac echocardiography is indicated for procedural guidance such as during device closure of atrial septal defect. But we have found it of particular interest in animals for a replacement of sorts of TEE whenever this approach proved difficult. ICE can be used for leadless pacemaker positioning as well as for mitral replacement ! Long story short, it strengthens our armamentarium and we are very much looking forward to sharing the insightful views that we can obtain with you during your next procedures.

WE HAVE CHOSEN THE INTRACARDIAC ULTRASOUND SYSTEM "VIEWMATE™ Z" AND VIEWFLEX INTRACARDIAC CATHETER BY ST JUDE BECAUSE WE FIND THE IMAGES VERY CRISP AND THE SYSTEM EASY TO OPERATE.



Accelerating your innovative research

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