

EAE/ASE 3D echocardiography image acquisition recommendations

January 3 2012

For the first time, a joint committee of the European Association for Echocardiography and the American Society of Echocardiography have issued recommendations on image acquisition using three-dimensional echocardiography (3DE). 'The EAE/ASE Recommendations for Image Acquisition and Display Using Three-Dimensional Echocardiography', are available in the January 2012 issue of the *Journal of the American Society of Echocardiography (JASE)*, published by Elsevier.

The recommendations are a practical guide on how to acquire, analyze, and display the various cardiac structures using 3DE, and discuss the advantages and limitations of this technique. The document also describes current and potential clinical applications of 3DE and its specific strengths and weaknesses in each scenario. The same issue of *JASE* includes articles that explore novel applications of 3DE and illustrate the clinical relevance of this technique. These studies include, 'Geometric Assessment of Regional Left Ventricular Remodeling by 3D Echocardiographic Shape Analysis Correlates with Left Ventricular Function', by Ivan S. Salgo et al., 'Three dimensional echocardiography in paravalvular aortic regurgitation assessment after transcatheter [aortic valve](#) implantation', by Alexandra Goncalves et al., and 'Automated Quantification of Mitral Inflow and Aortic Outflow Stroke Volumes By 3-D Real-Time Volume Color Flow Doppler Transthoracic Echocardiography: Comparison with Pulsed Wave Doppler and Cardiac Magnetic Resonance Imaging', by Paaladinesh Thavendiranathan et al.

3D echocardiography has been of considerable interest to researchers for

more than 30 years, but improvements in imaging technology have made this technique more suitable for clinical use. Editor-in-Chief Dr. Alan S. Pearlman states, "I believe that real-time volumetric imaging using 3D echocardiography now provides a practical way to measure ventricular volumes and [ejection fraction](#) without making any assumptions about chamber geometry, and suspect that one day this imaging method will surpass current 2D echo imaging, just as 25 years ago 2D imaging supplanted M-mode echocardiography."

It is increasingly clear that 3D echo provides unique views in patients with valvular and congenital heart disorders, and the clinical use of this technique is likely to grow rapidly.

Provided by Elsevier

Citation: EAE/ASE 3D echocardiography image acquisition recommendations (2012, January 3) retrieved 19 April 2024 from

<https://medicalxpress.com/news/2012-01-eaease-3d-echocardiography-image-acquisition.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.