

improve with time, the time required to perform an examination and variability in image quality between patients will still remain a problem.

Which Is the Better Method for Assessing Changes on Doppler Echocardiograms?

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Echocardiographic techniques are commonly used to noninvasively assess cardiac valvular structure and function. The detection and quantitation of valvular regurgitation generally relies on color Doppler imaging and is reported using a semiquantitative scale (ie, mild, moderate, or severe). When serial studies are preformed, differences are often noted in the subjective perception of severity grade. These differences can either be reported based on the independent examination of serial studies or the side-by-side comparison of studies.

Specificity of Doppler Echocardiography for the Assessment of Changes in Valvular Regurgitation: Comparison of Side-by-Side Versus Serial Interpretation

Weissman NJ, Panza JA, Tighe JF Jr, et al.

J Am Coll Cardiol. 2001;37:1614–1621.

This study examines the specificity of two different methods for assessing change in aortic, mitral, and tricuspid valvular regurgitation in subjects (n = 219) from the placebo arm of a randomized, double-blind, clinical trial.

These data suggest that side-by-side comparison for assessing change in valvular regurgitation is more reliable than the independent evaluation of serial studies.

Three echocardiograms were recorded over a 10-month period. An initial and a 3-month echocardiogram were read as independent groups, blinded to all parameters except sequence. The initial and 10-month echocardiograms were read side by side, blinded to all parameters

including sequence. The specificity of the serial versus side-by-side method for determining change in mitral regurgitation grade was 55.8% versus 93.2% ($P < .001$); tricuspid regurgitation 63.8% versus 97.6% ($P < .001$); and atrial regurgitation 93.7% versus 96.6% ($P = .08$). Most of the change occurred in the differentiation of none versus physiologic/mild regurgitation and was of limited clinical significance. The percentage of echocardiograms interpreted as non-evaluable was lower for the side-by-side method than for the serial evaluations. These data suggest that side-by-side comparison for assessing change in valvular regurgitation is more reliable and has a higher specificity and minimal data loss when compared to the independent evaluation of serial studies. The findings of this study are important, because although side-by-side comparison is more difficult unless the data are stored digitally, it appears to be the better technique for accurate evaluation of changes in the severity of regurgitation. ■

Lipid Disorders

Antioxidants as Adjuvant Therapy for Cardiovascular Disease

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A dilemma currently facing primary care providers, internists, and particularly cardiologists is whether to recommend the use or the discontinuation of antioxidants as adjuvant therapy for the prevention of cardiovascular disease and events. It is quite common in the course of taking a history that patients will present a list of medicines they are currently taking that includes an antioxidant cocktail of at least Vitamin E and C. Recent data on antioxidants' safety and efficacy provided by the recent HOPE (Heart Outcomes Prevention Evaluation) Trial and the trial by Cheung et al (reviewed below) not only bring into question the usefulness of antioxidant therapy but also expose potential pitfalls of such therapy. This certainly impacts our approach to patients who inquire as to the benefit of these antioxidants. Our love affair with current antioxidant therapies