

Foreword



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Contrast echocardiography (ECHO) has matured from a trick for detecting shunts to an integral part of echocardiographic practice. If your ECHO laboratory is not using contrast routinely, it is time to seriously consider it. This issue of the *Cardiology Clinics* is a good starting point. Drs. Vannan and De Maria have put together a comprehensive yet practical series of articles on this topic that provides all the necessary information for initiating or refining the use of this technology. This is truly an outstanding issue assembled by the leaders in this field.

There are two basic uses for contrast ECHO: intracavitary contrast and myocardial contrast. I have found the former very useful for shunt detection, left ventricular volume and performance measures, and wall motion analysis, especially during stress ECHO. The latter, myocardial contrast echo, is extremely helpful for identifying the myocardium as opposed to thrombus or pericardial structures. These are practical uses of contrast ECHO that confront ECHO laboratory

personnel every day. Other more novel uses of myocardial microcirculatory contrast imaging are emerging, the most exciting of which is the ability to deliver drugs by ultrasonic rupture of drug-containing microbubbles in the myocardium. As we translate molecular genetic advances to the clinical arena, this drug delivery system may aid in the selective application of powerful alterations in myocardial or vascular genes.

Clearly, the future of contrast ECHO is bright and more uses will emerge rapidly. However, at this stage of development, it is still highly useful in day-to-day cardiac ECHO and should be part of every laboratory's armamentarium.

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