

Editorial

Technical advances in computer technology and changing clinical perspectives have resulted in the rapid development of a new and wide range of diagnostic cardiac imaging modalities. Cardiac ultrasound is one of these and has witnessed an explosive growth. The development of the technique required original thinking, introduced new concepts, and did not mimic the existing diagnostic methods. As a consequence, it opened fresh horizons for clinical research and made important contributions to our understanding of cardiac disease and, in two decades, became the most widely disseminated diagnostic tool in cardiology, more appropriately named the 'non-invasive imaging and hemodynamic laboratory'. The modern echo/Doppler laboratory nowadays represents the best cost-effective investment in clinical cardiology. Its mobility and availability in all clinical settings combined with its comprehensive simultaneous assessment of structure, function, and hemodynamics is unique. Very often, especially in the critically ill, invasive, time-consuming, and costly diagnostic tests can be avoided.

Cardiac ultrasound is competitive with nuclear techniques, computed tomography, and magnetic resonance imaging for high-quality tomographic

evaluation of the anatomy, but is superior in function display of motion throughout the cardiac cycle.

The full impact of ultrasound technology on the practice of cardiology has yet to be realized. The future promises greater portability, better resolution, quantitative analytic methods, and further replacement of invasive methods. Further impact will be limited only by our imagination, our curiosity, and our resources for research and development.

We are very grateful to the authors, who have contributed with excellent review papers to this special issue, published on the occasion of the 10th Symposium of Echocardiology at the Thoraxcentre, Erasmus University, Rotterdam, in which they highlight the impact of two decades of cardiac ultrasound on the practice of cardiology and the directions in which the technique will evolve in the future.

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