

Editorial

Diastolic Dysfunction Of The Left Ventricle

Much has been learnt about the mechanics of the cardiac muscular chambers since the classic animal experiments on the animal heart done in the last century. It was obvious that a lot of attention should have gone to systolic function, but, right from the start much knowledge has accumulated in the basic sciences and catheterization laboratories about diastolic functions of the heart in particular of the main left ventricular pump. However, clinicians the world over have been so enamoured with the systole that diastole had been relegated to the domain of those tinkerers in the lab who do not have much to do with the real world.

With the ready availability of the echocardiogram to the practising physicians, his reliance on what he could see and measure, i.e., the systolic function gave him a powerful routine tool. It was then that he slowly discovered what had been known all along by the lab oriented and the researcher, that people in frank congestive failure would turn out to have normal systolic function and some of those with large hearts but asymptomatic would turn out to have poor systolic function. It became apparent that diastolic function differences were at work here rendering the patient with totally normal systolic function incapacitated in pulmonary edema and allowing the patient with a poorly contracting left ventricle to play tennis without a problem. It also became apparent to him that he did not have very good non-invasive measures of this diastolic function. While the physical examination, the X-Ray chest, and, the Doppler all provided clues, he did not and still does not have as easily obtained and as reliable and as subtle indicators as those of regional and global myocardial systolic function.

Over the years, systolic function of the left ventricle has also proven to be the most reliable predictor of survival and superior even to coronary anatomy alone. What is also emerging now are hints that perhaps diastolic function independent of systolic function may also be a predictor of prognosis. The next decade may well be the decade wherein we would see the development of better non-invasive indicators of the diastolic left ventricular function. This will in fact complete man's mastery over both phases of heart action, i.e. systole as well as diastole.

Once again man learns that what is not visible may be equally important! Even more so?

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