Hypertrophic and restrictive cardiomyopathy

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Echocardiography has evolved to be an important tool in the assessment of patients with hypertrophic and restrictive cardiomyopathy. Hypertrophic cardiomyopathy (HCM) is a common inherited cardiovascular disease and the most frequent cause of sudden death in young athletes. HCM causes functional disability from heart failure and stroke. Therefore, the identification of patients with HCM is a challenge.

Two-dimensional echocardiography is the usual initial method of diagnosis. Echocardiography can be used to confirm the heart dimension, the pattern of ventricular hypertrophy, systolic and diastolic function and the severity of the outflow gradient. Echocardiographic criteria for diagnosis of HCM have been proposed[1,2]. The World Health Organization defines restrictive cardiomyopathy (RCM) as a myocardial disease characterized by restrictive filling and reduced diastolic volume of either or both ventricles with normal or almost normal systolic function and wall thickness. Clinically, RCM is difficult to distinguish from constrictive pericarditis, which is treatable. Echocardiography and cardiac magnetic resonance imaging (MRI) have been reported to be comparable in their ability to differentiate RCM from constrictive paricarditis. Compared with MRI, echocardiography may be restricted by by inadequate echo window, and pericardial thickness can be overlooked.[3] The presentation will be shown current and emerging methodology approach and echocardiographic tools used in contemporary echocardiography in the diagnosis of HCM and RCM and differentiation from mimicking diseases, assessment of prognosis, and managing therapeutic approach.

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LITERATURE

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