

# Cardiovascular Magnetic Resonance in HF: Can It Aid in Modification of Heart Failure Management ?

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Although, far improvement in technology and wide use of CMR in clinical practice, questions whether CMR can really aid selection of treatment or management have been continuously raised. Lists following are potential usefulness of CMR to guide selection of management option. First, determination of myocardial viability in patients with ischemic cardiomyopathy. It can guide revascularization therapy such as coronary artery bypass surgery. But we need results of prospective multicenter study as previous STICH trial failed to achieve positive results. Second, CMR can also guide device therapy such as ICD implantation as primary purpose in patients with hypertrophic cardiomyopathy or non-ischemic dilated cardiomyopathy, prediction of responder of cardiac resynchronization therapy by documenting scar location where LV pacing will be placed. Third, in patients with thickened myocardium, differential diagnosis of underlying cardiomyopathy such as hypertrophic cardiomyopathy, Fabry's disease, cardiac amyloidosis or sarcoidosis can guide disease specific treatment. Fourth, in severely reduced LV systolic function but poor echo window, detection of hidden LV thrombosis can guide starting anticoagulation treatment. Fifth, regarding right ventricular function and fibrosis, CMR can aid diagnosis of arrhythmogenic RV cardiomyopathy then guide ICD implantation. In cases with severe tricuspid regurgitation in patients with previous mitral valve surgery or isolated type, accurate assessment of RV function and detection of RV fibrosis can predict success of tricuspid valve surgery. Here, we will discuss above topics.