

*Cardiovascular MR Imaging: Pushing the Limits –
Part 2: Case-Based Studies in CMR*

Non-Ischemic Cardiomyopathy

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The term "Non-ischemic Cardiomyopathy" (NICM) is frequently used as a wastebasket term to comprise a wide variety of myocardial disorders occurring in the absence of identifiable pathology. Despite significant effort to provide a unifying description of the cardiomyopathies, confusion regarding the exact definitions of terms such as "primary" and "secondary" has led to inconsistent clinical application.

Additionally, as the underlying causes of previously "idiopathic" diseases have been discovered, the waters have become increasingly muddied. And although "-myopathy" suggests poor myocardial function, even that aspect of cardiomyopathy is variable since the most common NICM - hypertrophic cardiomyopathy - is actually characterized by increased ejection fraction. In short, the only real unifying theme of NICM has been that the underlying myocardial abnormality is not a result of coronary artery disease.

Recent guidelines for the classification of cardiomyopathy have proposed grouping the NICM into specific subtypes based on morphology and function, followed by additional classification into familial and non-familial subtypes. Since the role of MRI in the evaluation of NICM is primarily for the assessment of cardiac structure and function, the emphasis of this case-based session will be on distinguishing the various cardiomyopathies based on cardiac morphology.

The focus of the session will be on the basic imaging features of the NICM's most frequently encountered in clinical practice. The utility of basic and advanced imaging sequences for the characterization of NICM will be discussed using specific case examples.