

Myocardial Strain Imaging Summary CD 2.12

- Myocardial strain imaging or speckle-tracking echocardiography (STE) is a modern ultrasound technique that is an adjunct to traditional transthoracic echocardiography to evaluate myocardial deformation.¹
- Given the ultrasound modality, there is no exposure to ionizing radiation or concern for contrast induced renal failure.
- The main areas of application of this technique has been in the assessment of myocardial mechanics, ischemic heart disease, cardiomyopathies, LV diastolic dysfunction, and in detecting subclinical myocardial dysfunction in patients undergoing chemotherapy for cancer or in those affected by heart valve diseases.²
- STE is considered the optimal deformation parameter for the detection of subclinical LV dysfunction which allows for clinical intervention prior to reduction in LVEF particularly useful in the field of cardio-oncology.²

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