

PROTOCOL: AMYLOIDOSIS

Cardiac amyloidosis – deposition of abnormal protein in the heart.

Cardiac Manifestations: Thickened echogenic walls, pericardial effusion, diastolic dysfunction, systolic dysfunction, low cardiac output, arrhythmias, apical sparing strain pattern

Inclusion Criteria

- Amyloidosis has been determined at Mayo by echocardiogram, or
- Study indication is amyloid or multiple myeloma

EIMS Data

Procedure Components: 2-D, Color Flow Doppler, Doppler, TDI, Strain Imaging

Serial Study: Amyloid, General

First Finding: Echocardiogram performed per amyloidosis protocol.

Billing Diagnosis: Amyloidosis (HCC)

Procedure: (TTE) 2D Echo Doppler Color

Charge Capture: Myocardial Strain - Hospital

Obtain the following if the last echo was:

- **≥ 2 years** → full echo + LV & RV longitudinal strain + RV wall thickness
- **< 2 years** → LV Function Protocol + following

2D	CFI	Doppler	Measurement
Parasternal			
			LV wall thickness
Apical			
			LV strain RV strain
Subcostal			
RV fx RV wall thickness			

Caveats and Tips

- Acquire apical views with a similar depth, width, & frame rate for speckle tracking
- Further assessment for diastology may be necessary (Valsalva, LA strain, pulmonary veins)
- If color flow Doppler demonstrates worsening regurgitation by ≥ two grades, perform comprehensive regurgitation assessment
- Report out Mayo calculated strain value for LV strain and vendor calculated strain value for RV strain (when RV strain package is used). Use RV strain package when available
- Discuss incidental findings with interpreting consultant