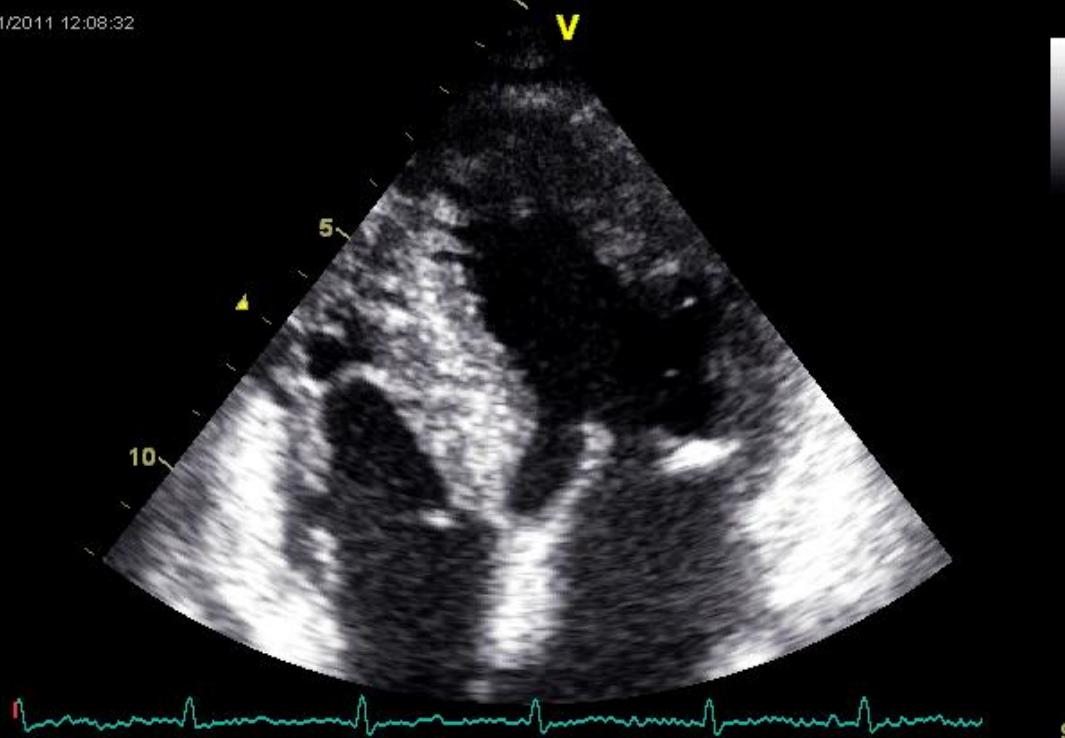


# Διαγνωστική προσέγγιση του αρρώστου με πιθανή καρδιακή αμυλοειδωση

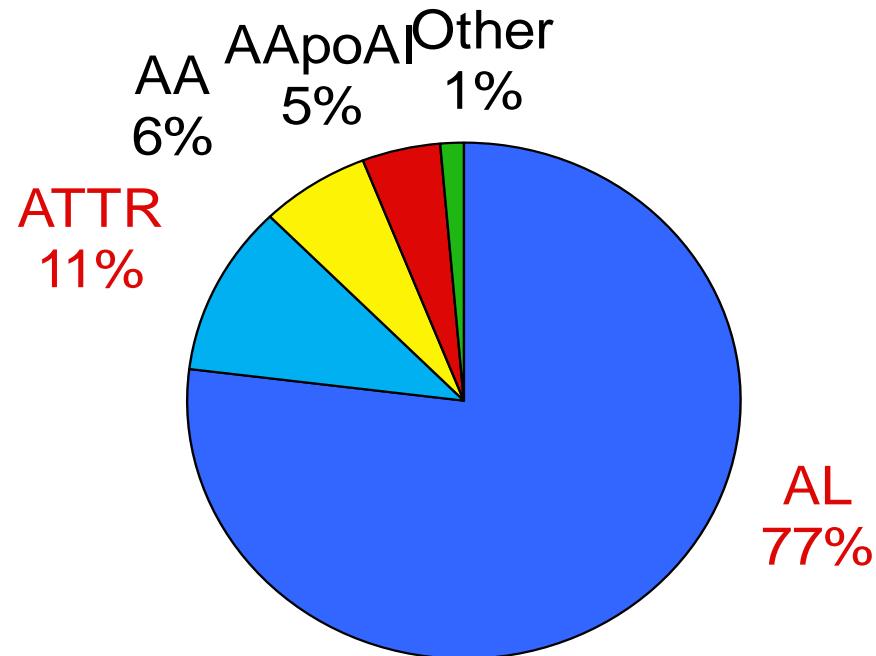
02/11/2011 12:08:32



**Θεραπευτική Κλινική**



## Ιταλία: Συχνότητα των διαφόρων μορφών αμυλοείδωσης (στοιχεία σε 2338 ασθενείς από το κέντρο αμυλοείδωσης της Pavia )



1780 patients with AL amyloidosis  
Incidence: 10 patients/million/year

Δεδομένα από Καθ. Ko G.Merlini



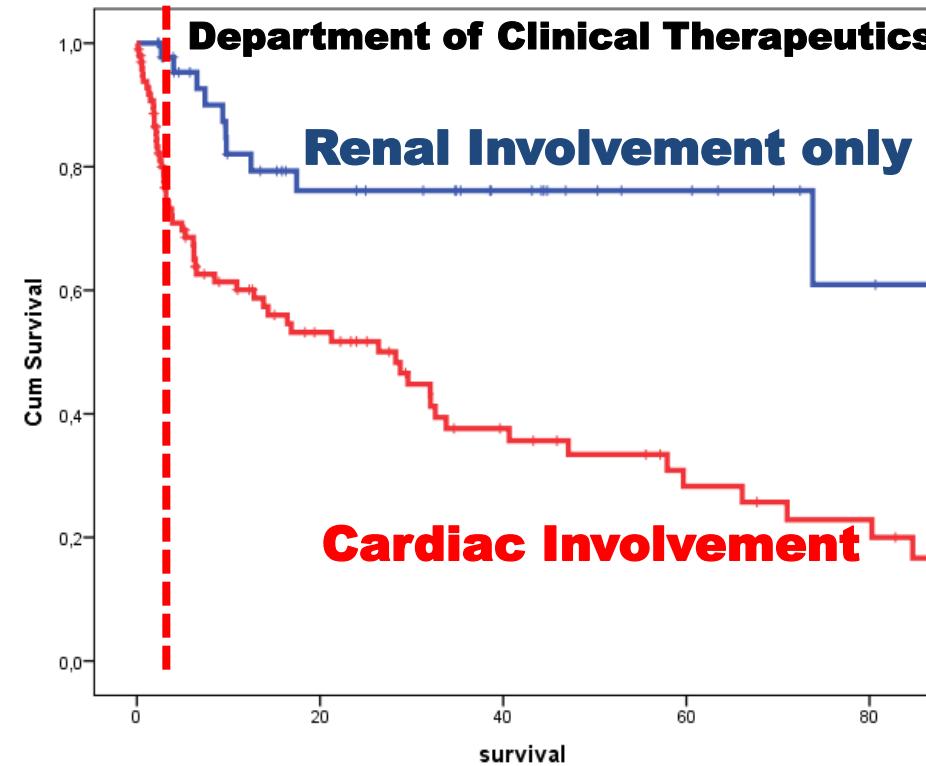
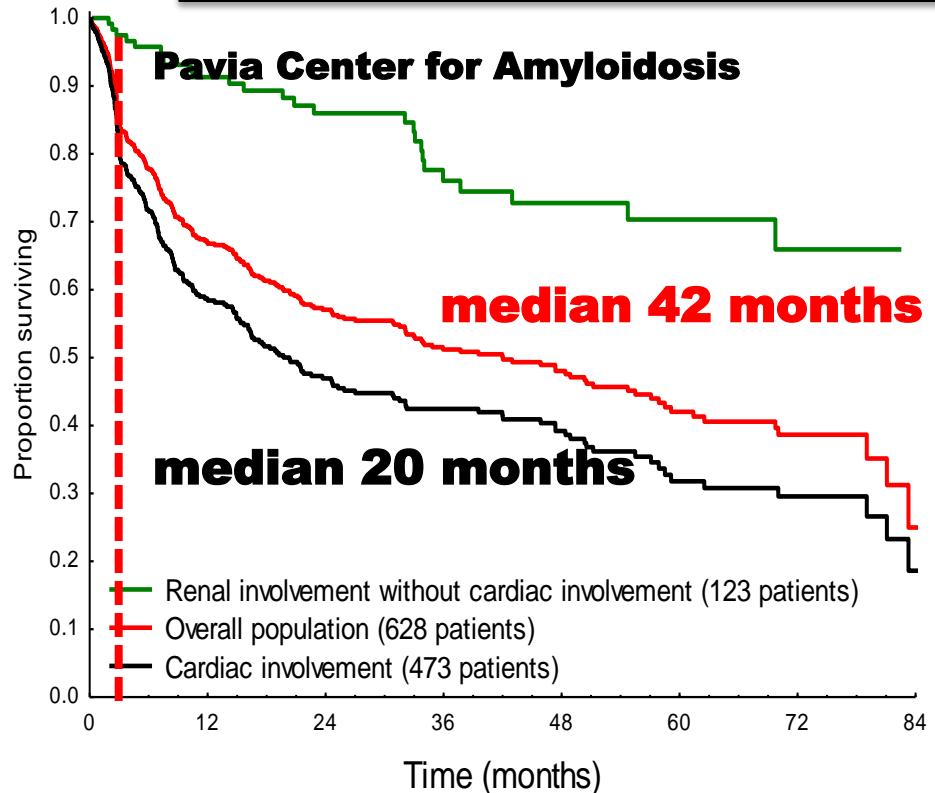
## Κλινική παρουσίαση της πρωτοπαθούς αμυλοείδωσης

|   |                                    |        |
|---|------------------------------------|--------|
| Γενικά συμπτώματα:                                    | Καταβολή, αδυναμία, απώλεια βάρους | 60-90% |
| Οίδημα κάτω άκρων                                     |                                    | 55-65% |
| Δύσπνοια στην προσπάθεια                              |                                    | 40-50% |
| Ορθοστατική υπόταση                                   |                                    | 27-30% |
| Δυσαισθησίες, παραισθησίες, σύνδρομο καρπιάίου σωλήνα |                                    | 23-28% |
| Δυσγευσία   |                                    | 15-18% |
| Πορφύρα   |                                    | 8-15%  |
| Μακρογλωσσία  |                                    | 10-15% |
| Διάρροια  |                                    | 8-15%  |
| Αμυλοείδωμα (ογκόμορφη εντόπιση)                      |                                    | 3-8%   |



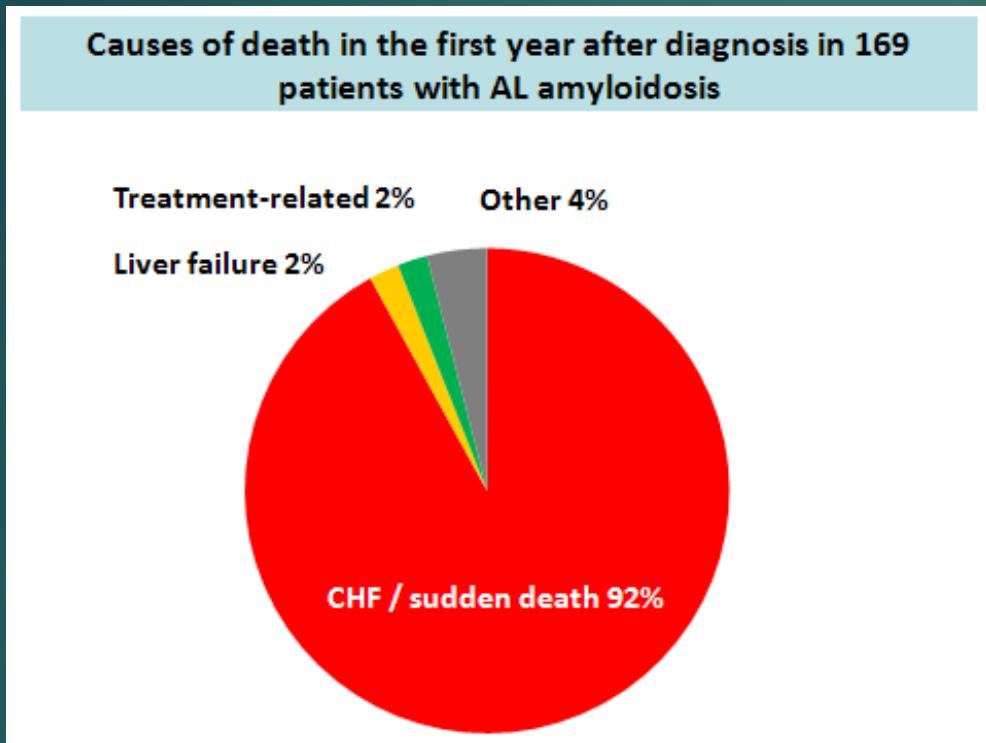
# Η προσβολή του μυοκαρδίου καθορίζει την πρόγνωση

~20% των αρρώστων με AL και προσβολή της καρδιάς  
καταλήγουν στους πρώτους 3 μήνες

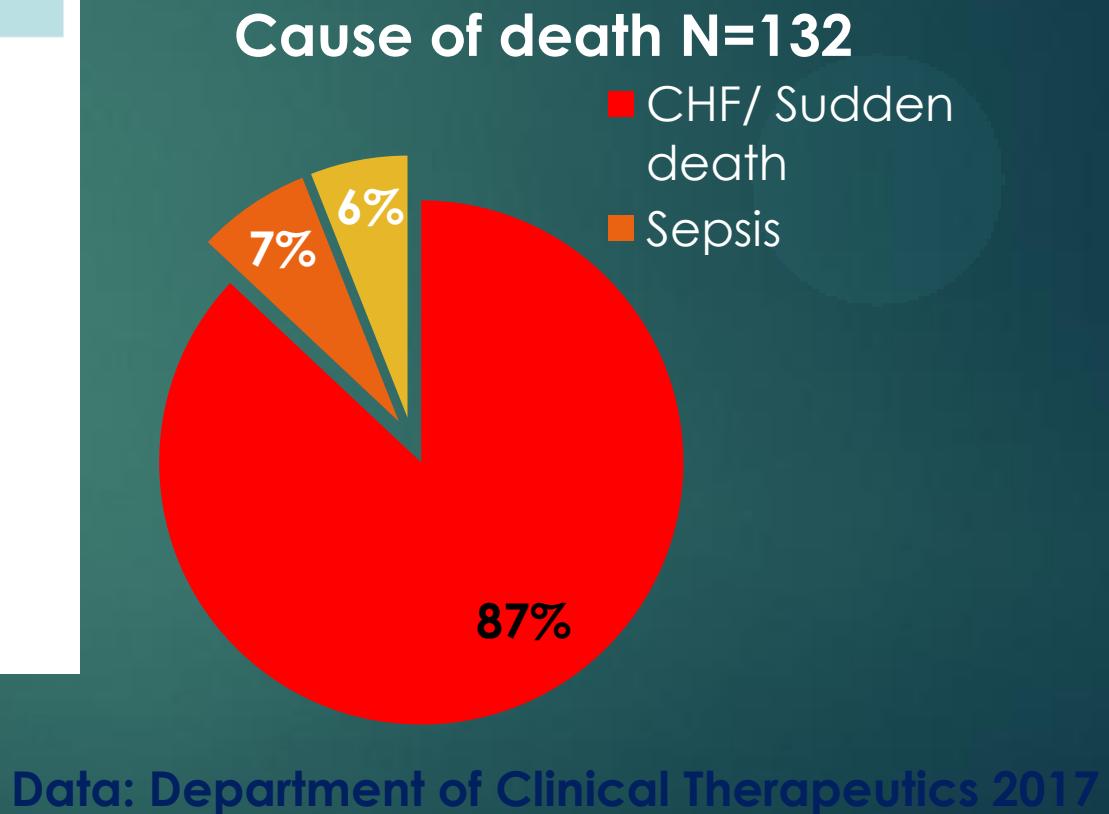


Η πρώιμη διάγνωση και έναρξη θεραπείας μπορεί να  
σώσει την ζωή αρρώστων με καρδιακή AL αμυλοείδωση

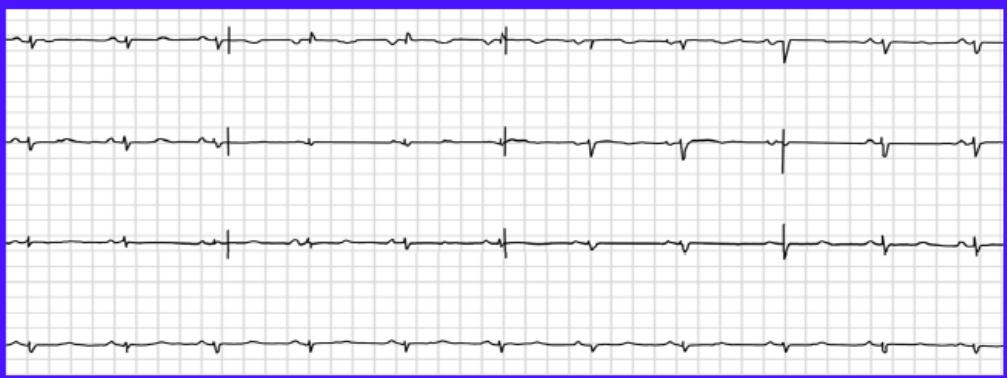
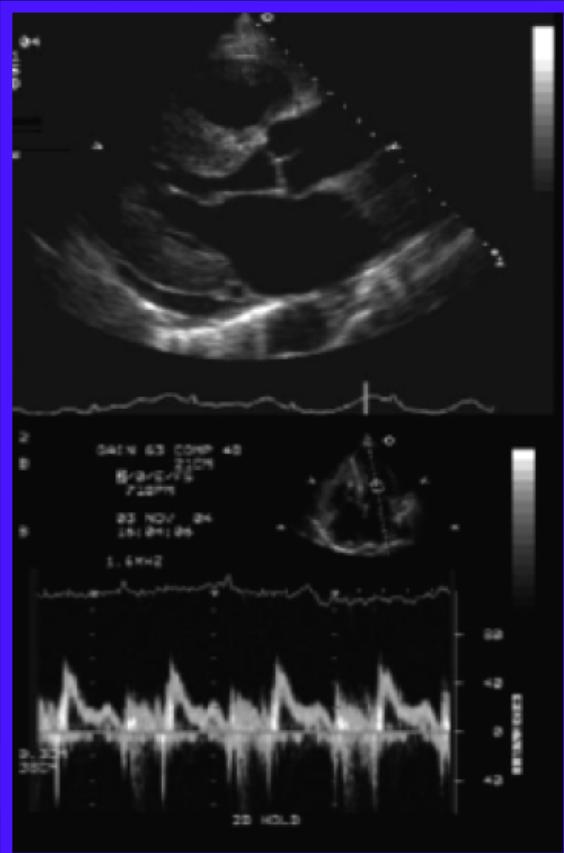
# Πρόγνωση των αρρώστων με AL αμυλοειδωση



Courtesy of Prof Merlini



# Cardiac Amyloid

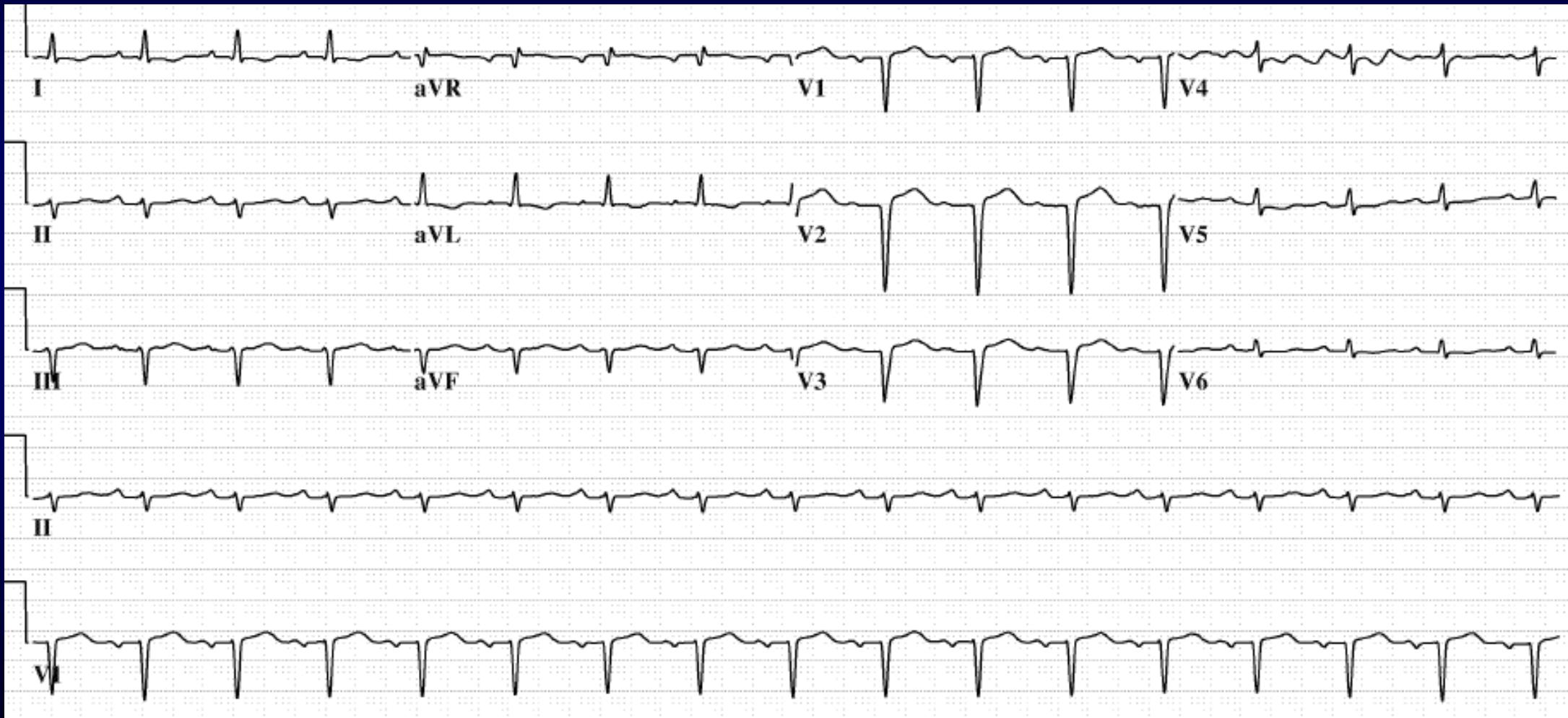


In the proper clinical setting  
these findings are as diagnostic  
as myocardial biopsy

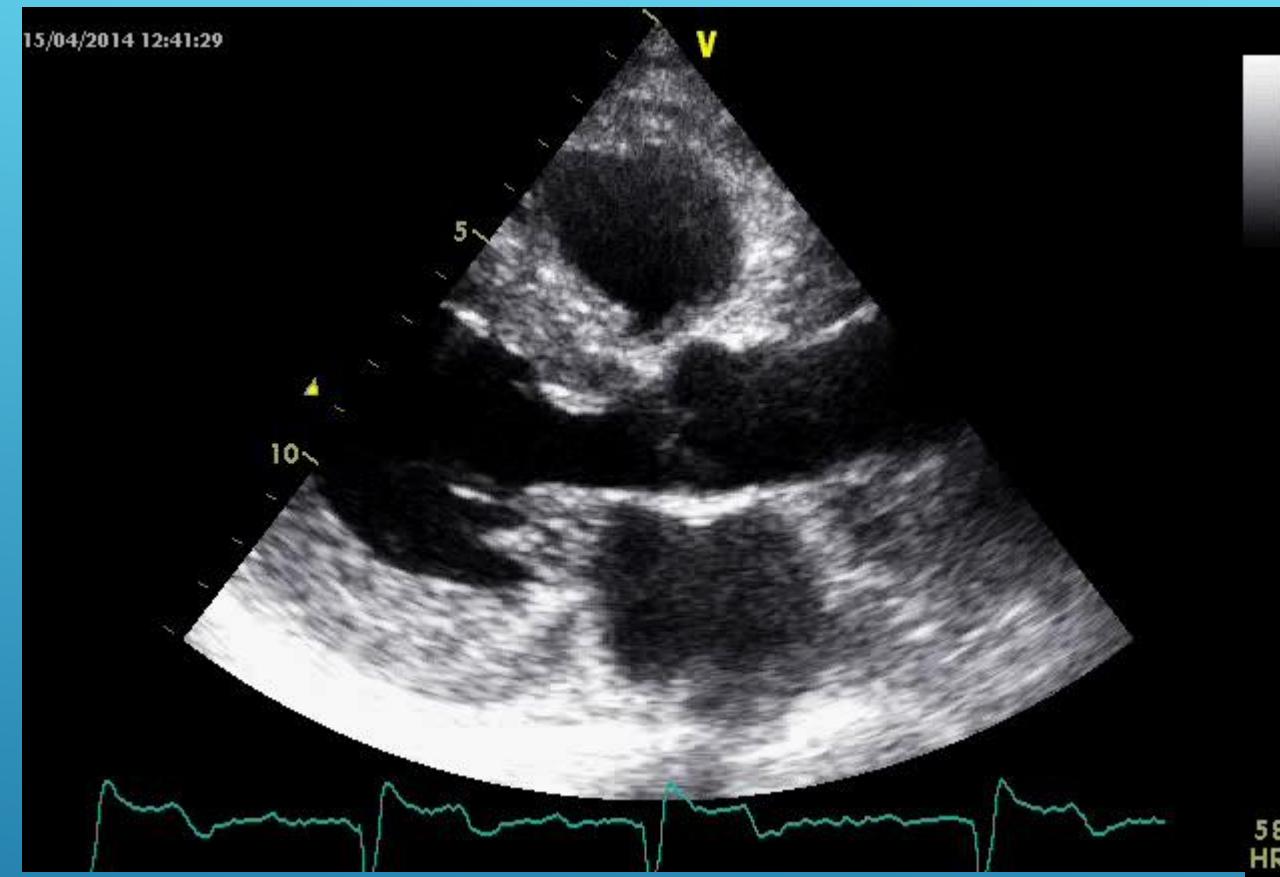


# ECG findings in cardiac amyloidosis

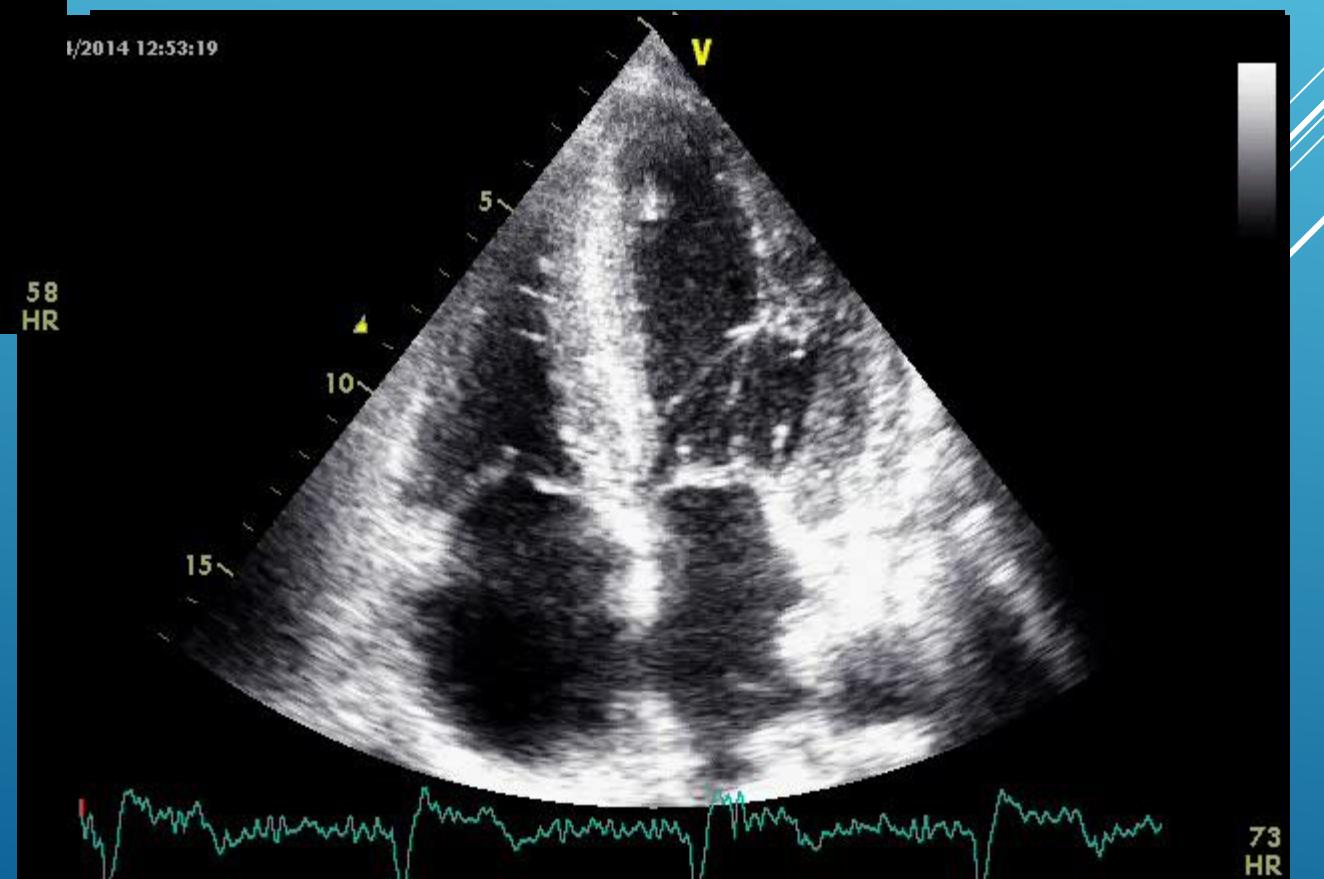
- ♥ **Low QRS voltage pattern**
- ♥ **Pseudoinfarction patterns**
- ♥ **Supraventricular arrhythmias (mainly atrial fibrillation)**
- ♥ **Atrioventricular or intra- and interventricular conduction defects**
- ♥ **Unusual axis deviations**
- ♥ **ECG may not demonstrate low-voltage complexes in individuals with ATTR**



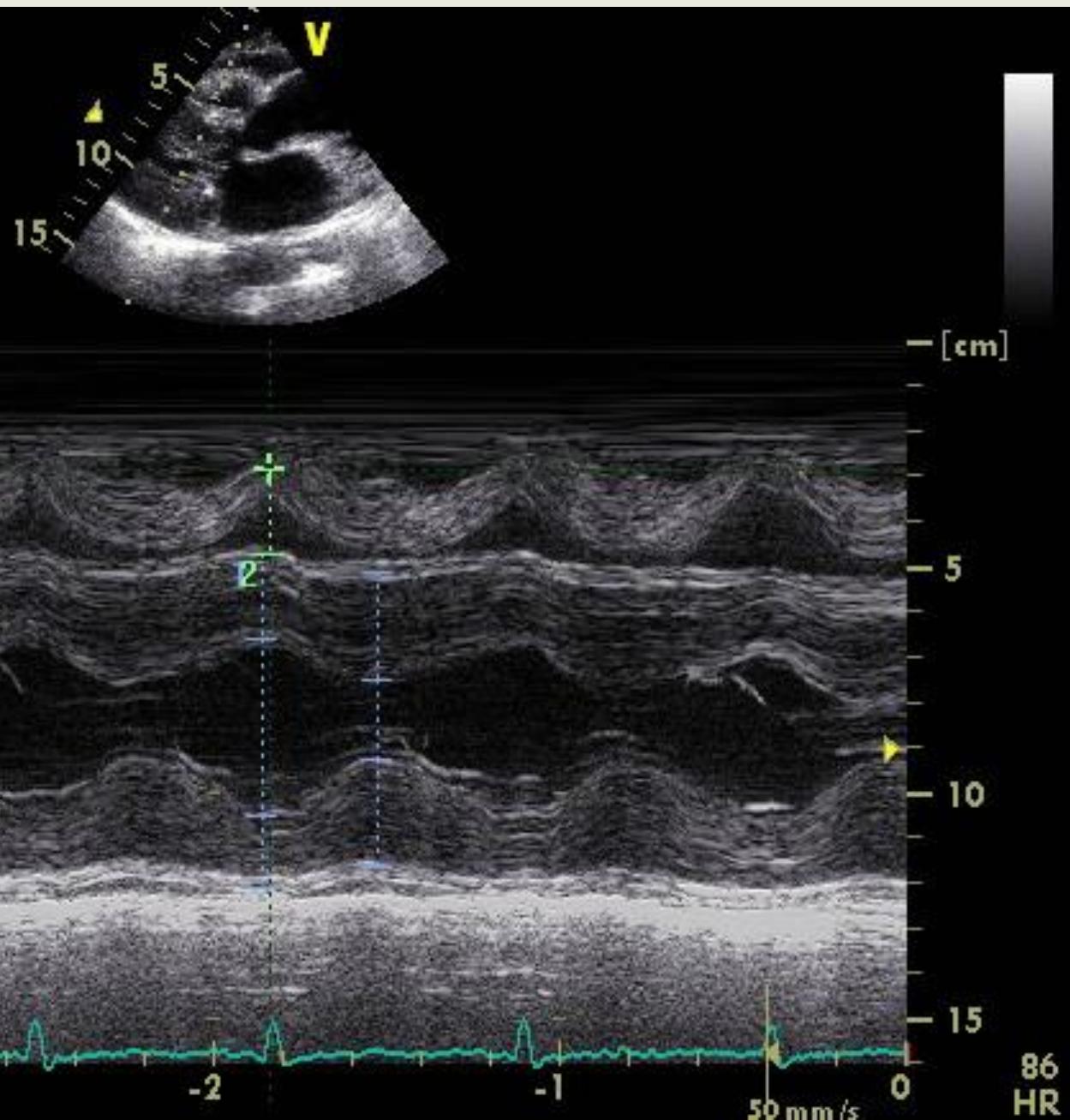
15/04/2014 12:41:29



1/2014 12:53:19

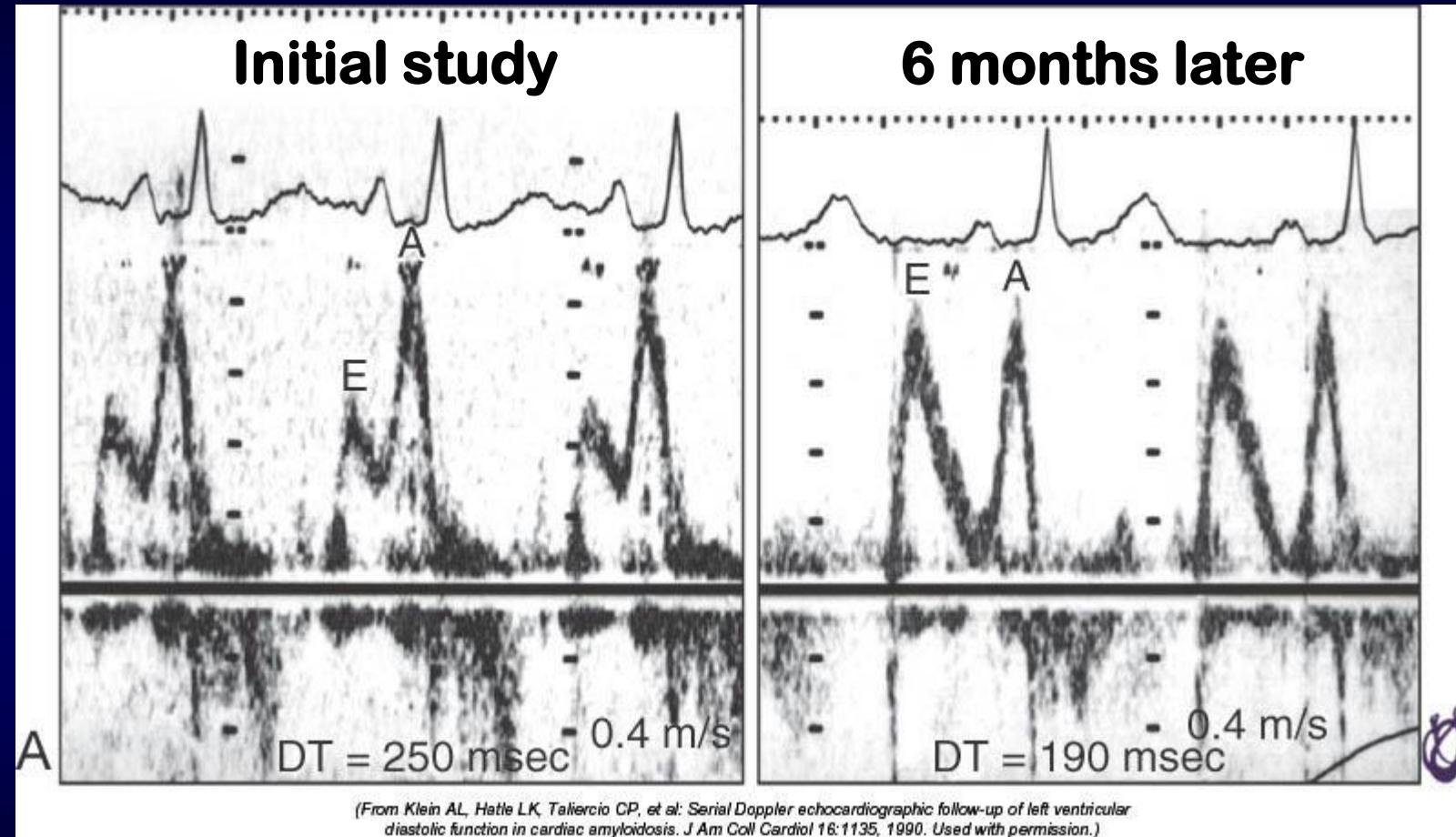


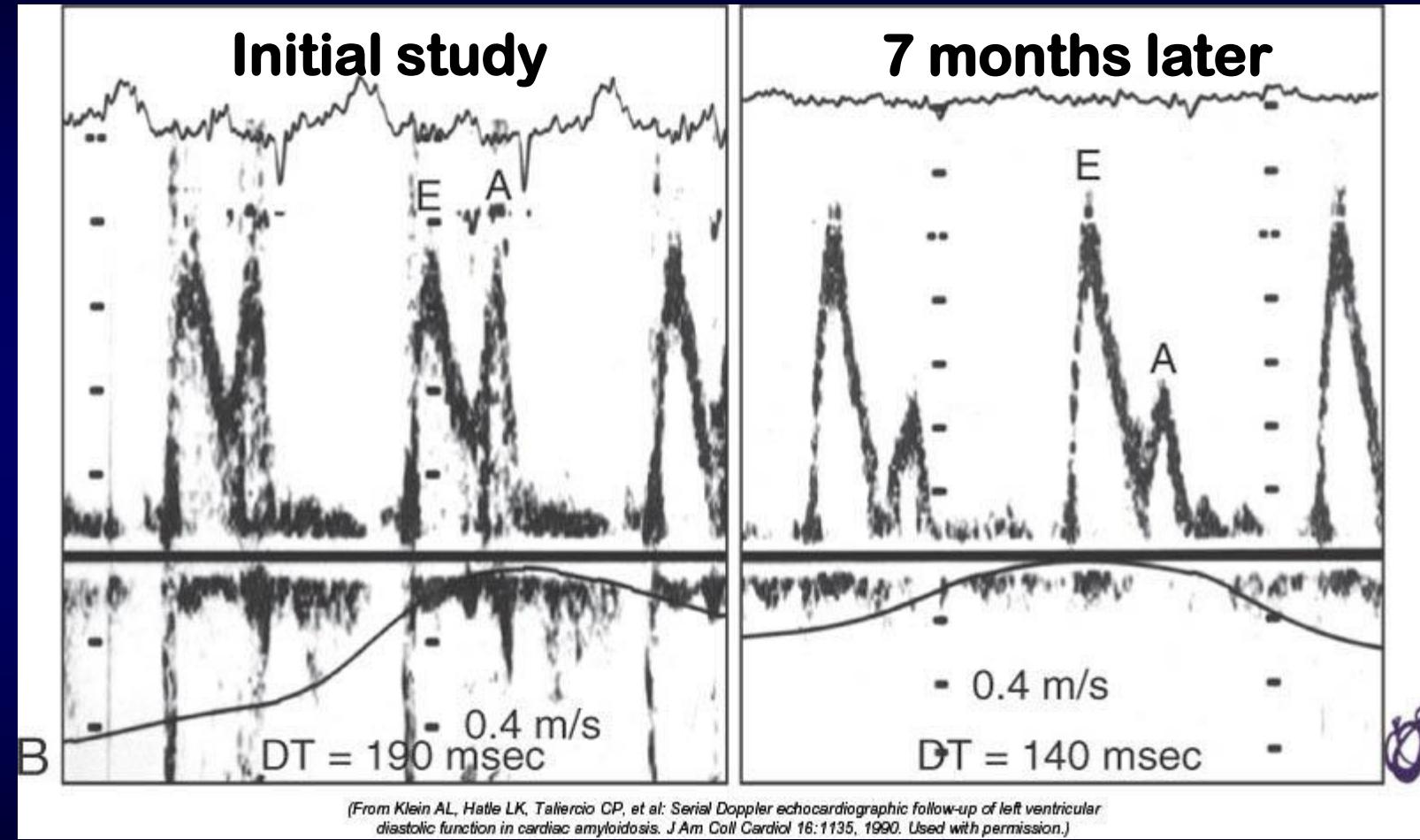
| 2 | RVIDd      1.87 cm  |
|---|---------------------|
| 1 | IVSd      1.87 cm   |
|   | LVIDd      3.91 cm  |
|   | LVPWd      1.59 cm  |
|   | IVSs      2.38 cm   |
|   | LVIDs      1.76 cm  |
|   | LVPWs      2.38 cm  |
|   | EDV(Teich) 66.51 ml |
|   | ESV(Teich) 9.16 ml  |
|   | EF(Teich) 86.23 %   |
|   | %FS 55.07 %         |
|   | SV(Teich) 57.35 ml  |

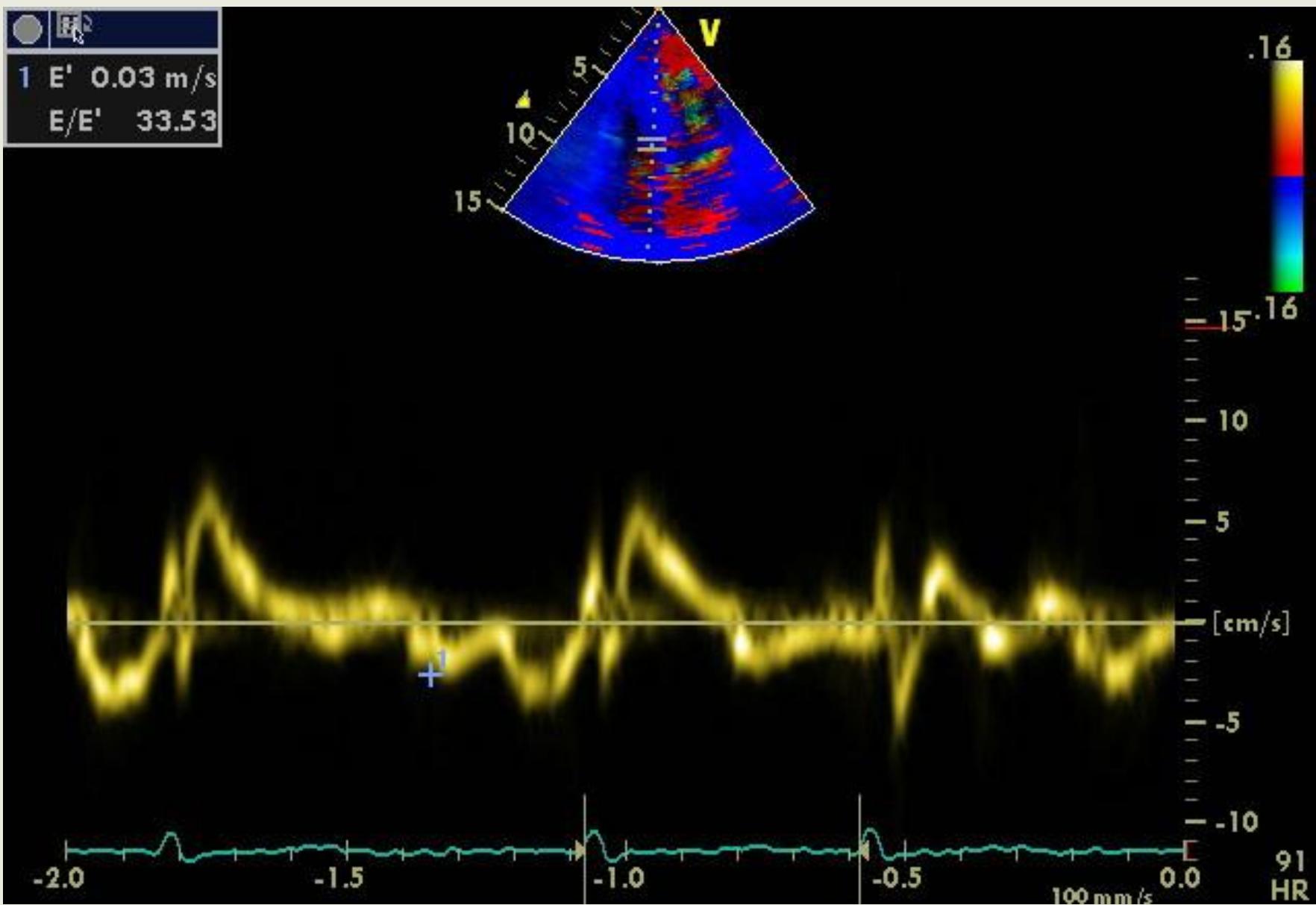




# Diastolic dysfunction in cardiac amyloidosis

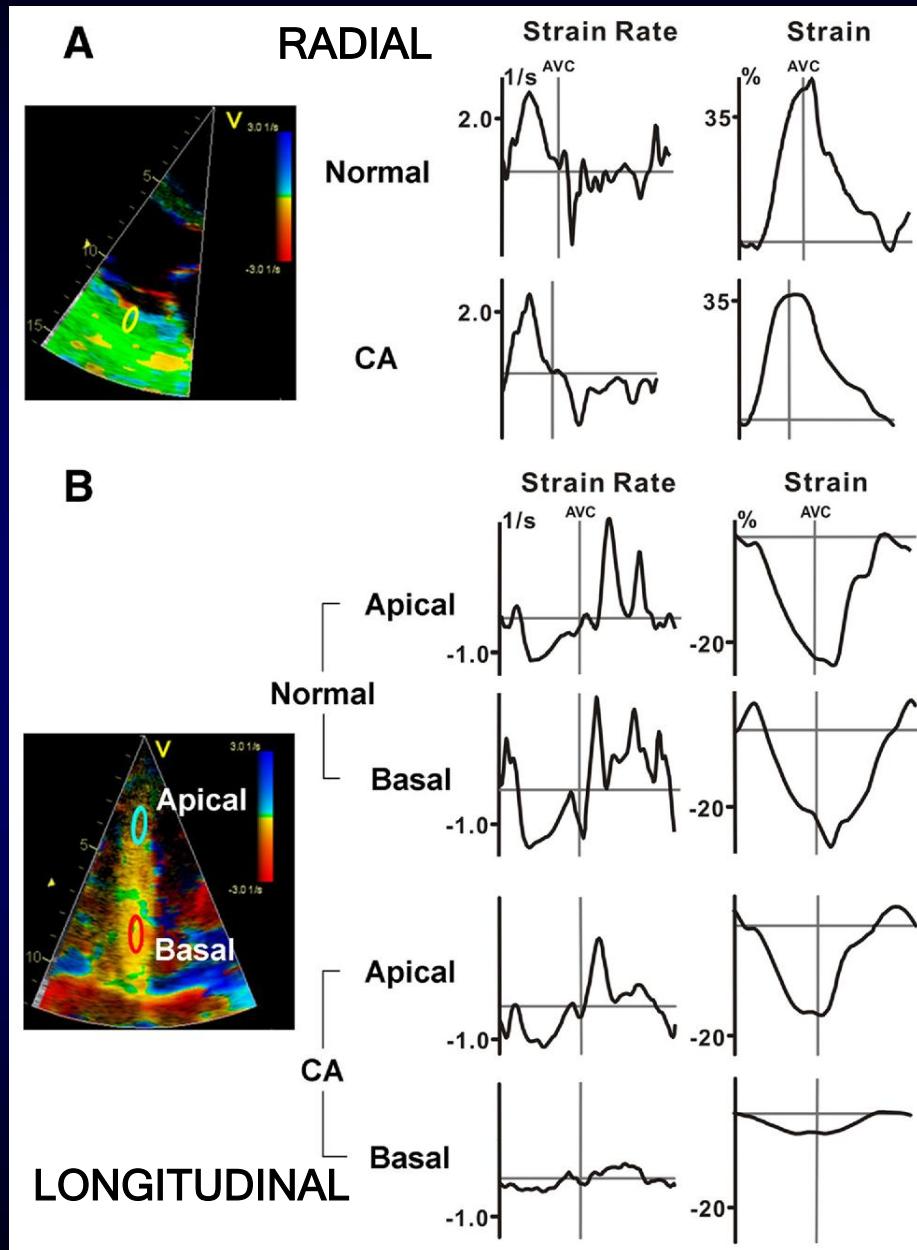






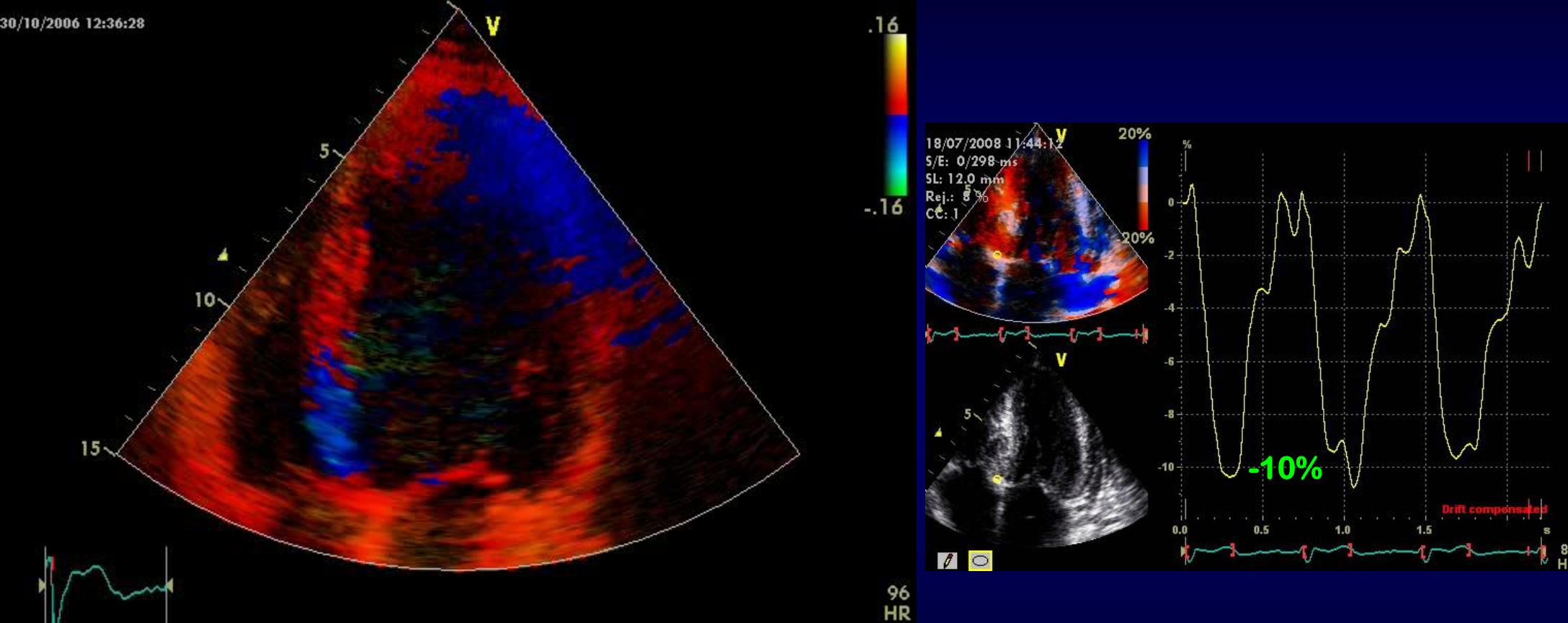


## TDI derived strain and strain rate in cardiac amyloidosis



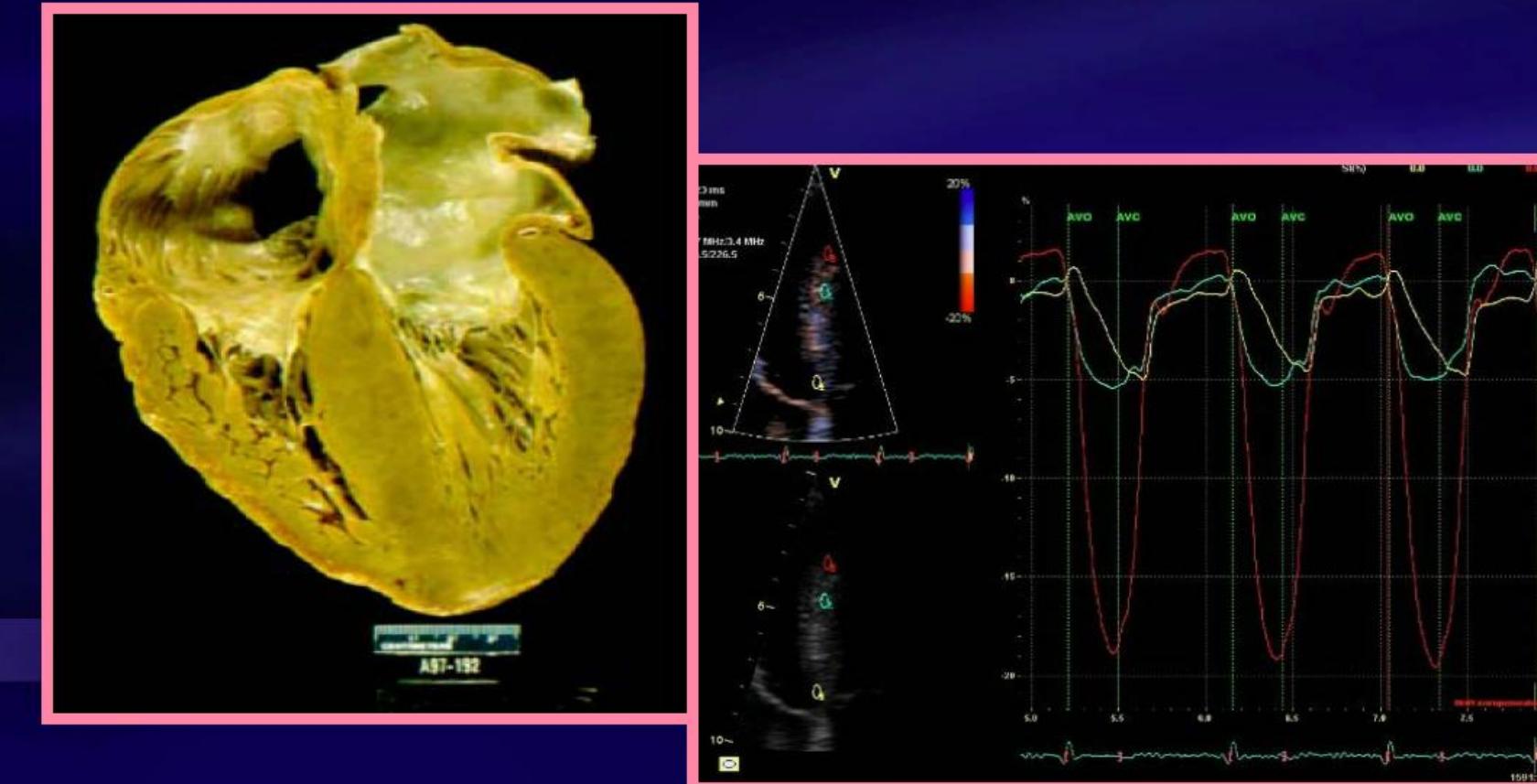


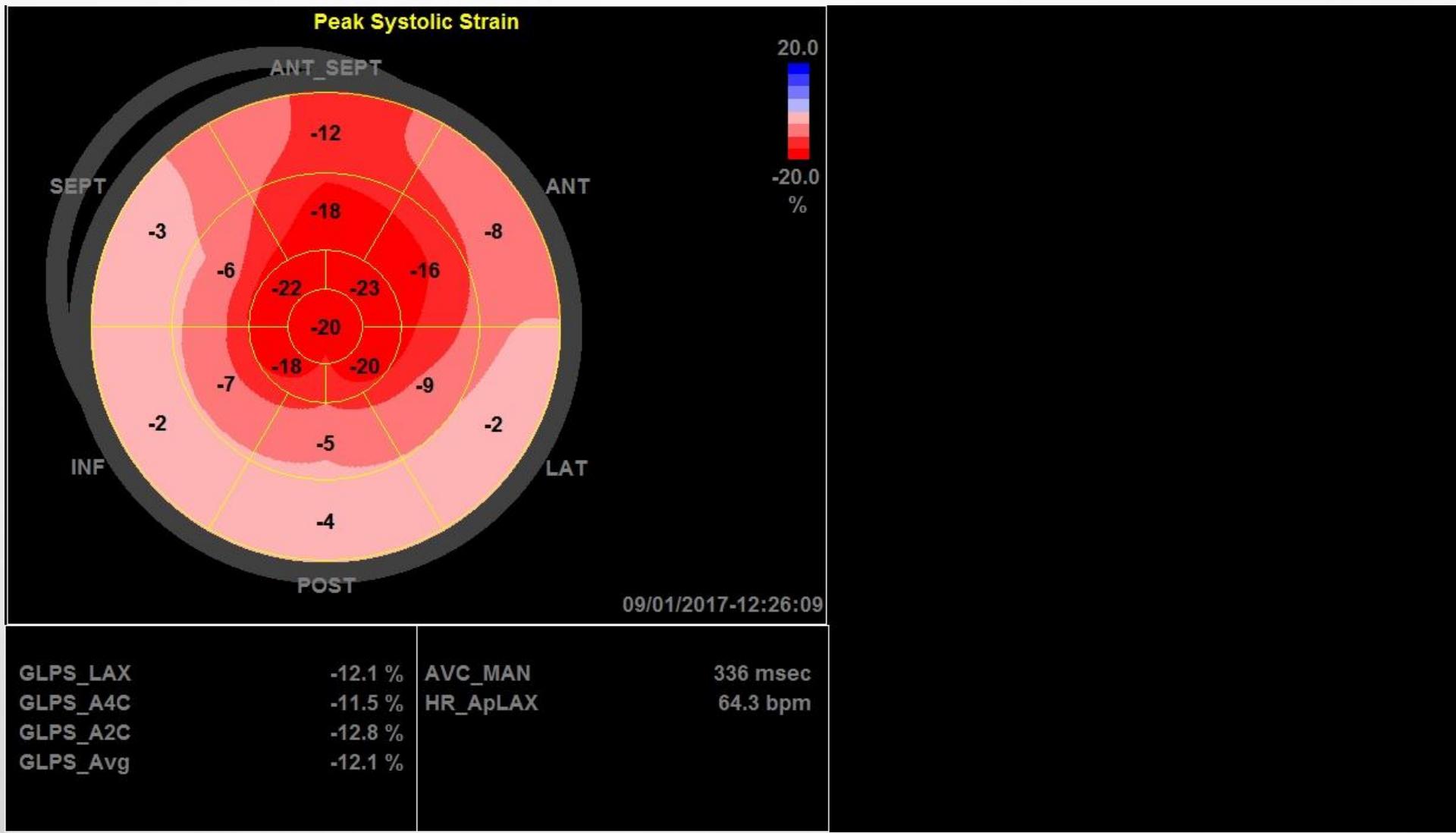
# TDI derived strain in cardiac amyloidosis

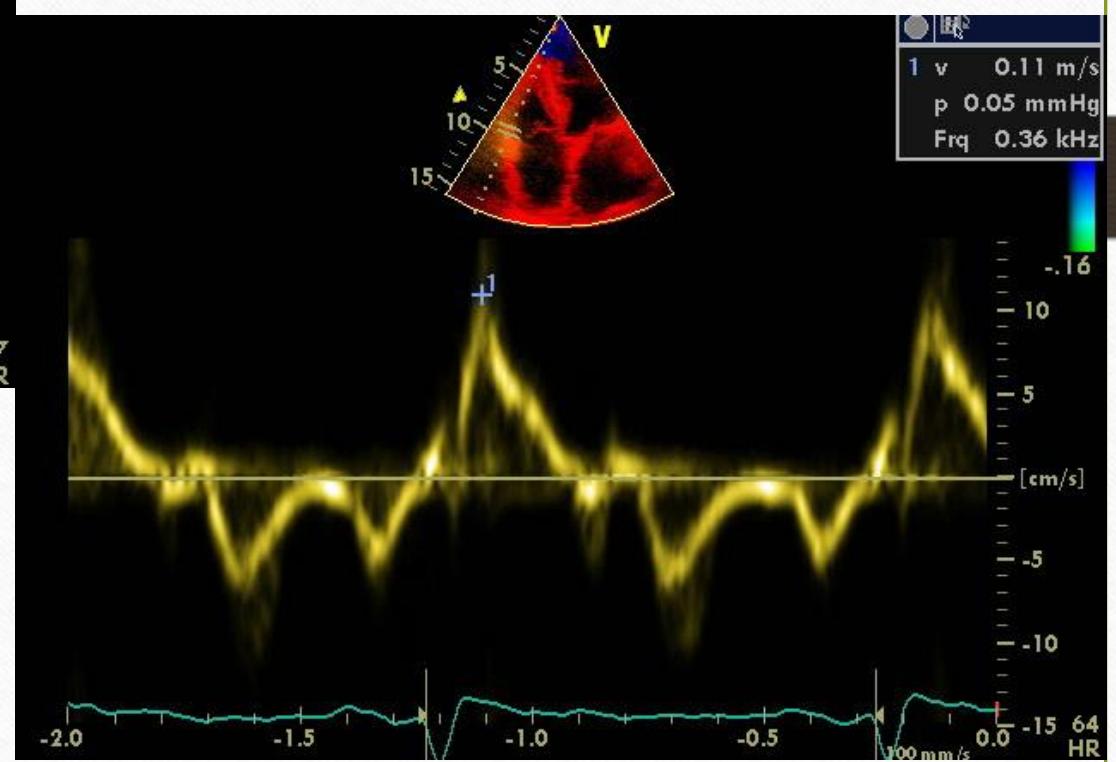




# Doppler Myocardial Imaging for Cardiac Amyloid



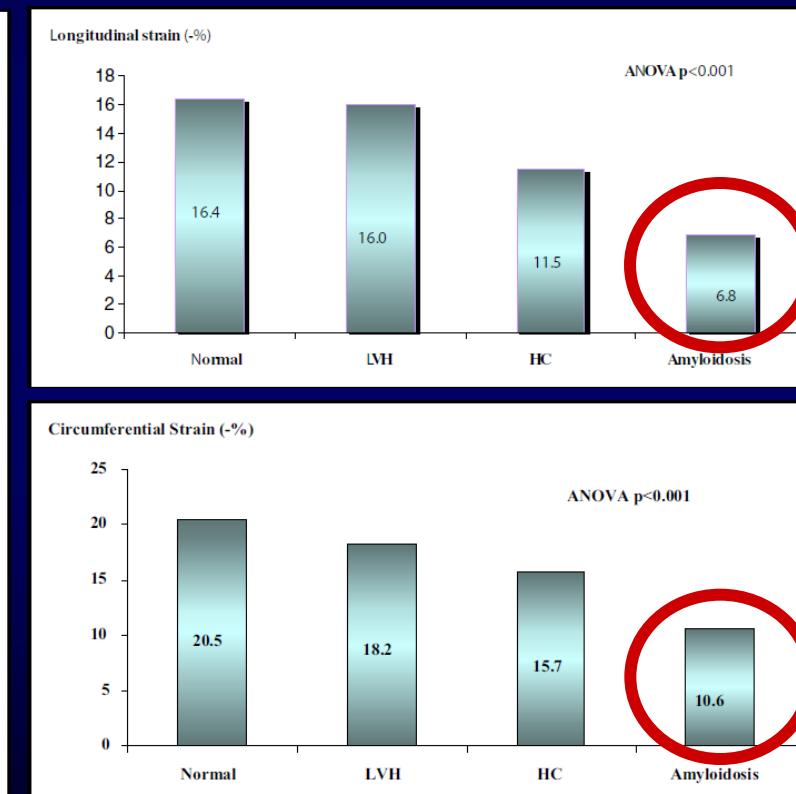
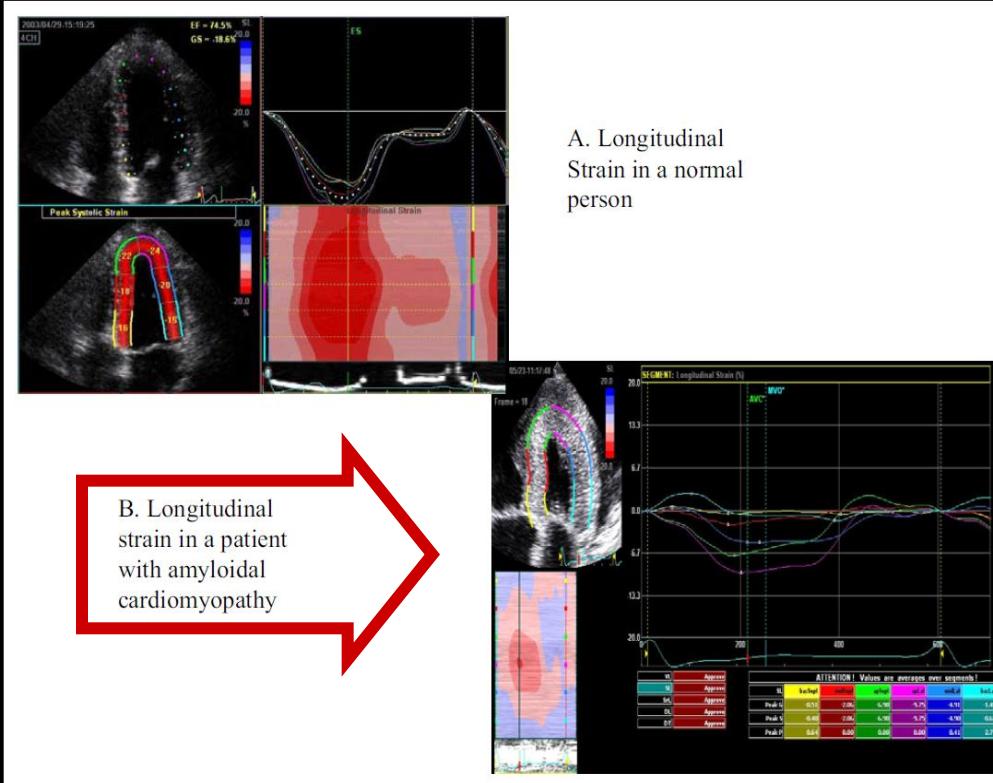


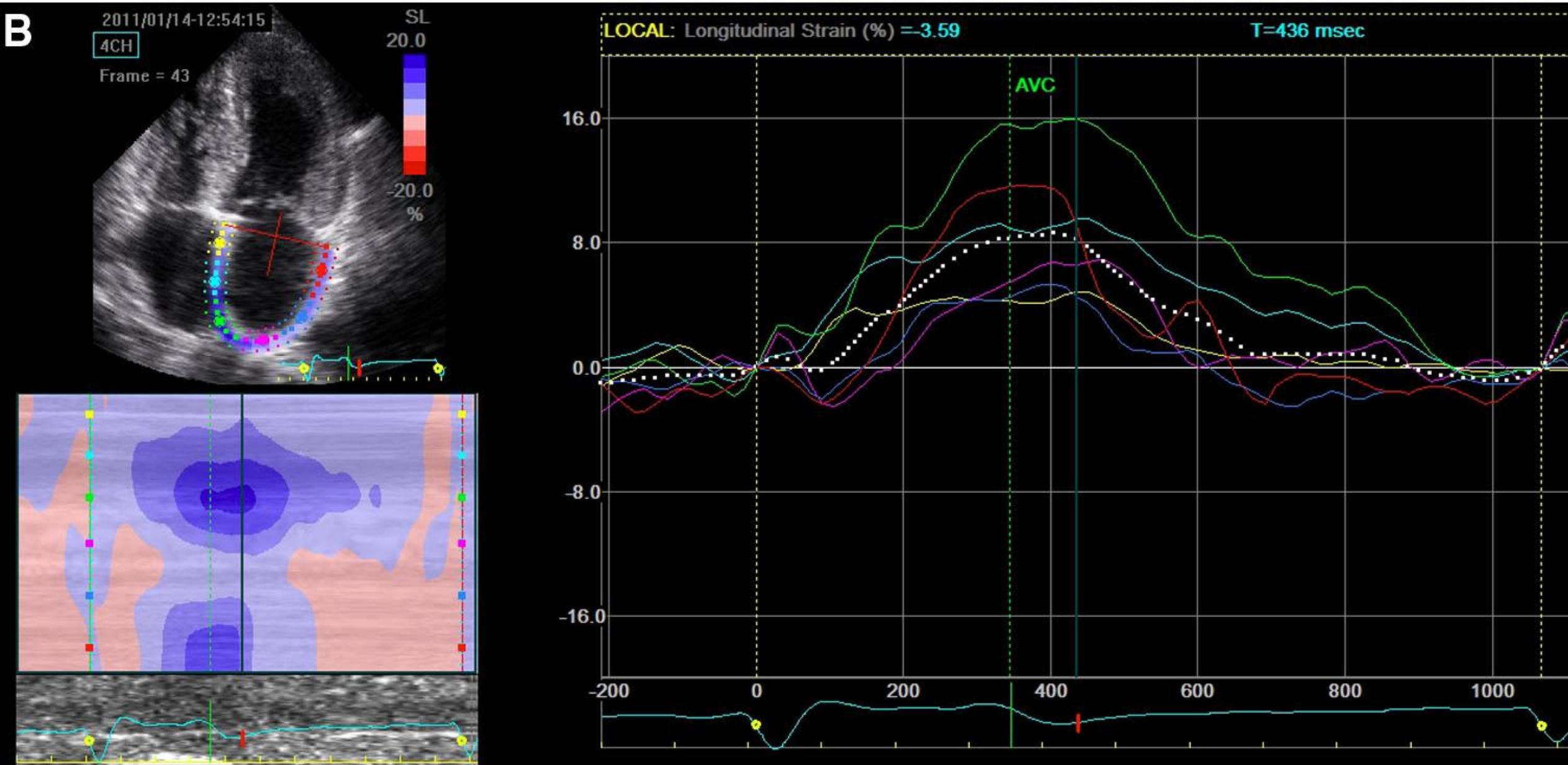




# Differentiation of Hypertrophic Cardiomyopathy and Cardiac Amyloidosis from Other Causes of Ventricular Wall Thickening by Two-Dimensional Strain Imaging Echocardiography

Jing Ping Sun, MD<sup>a,\*</sup>, William J. Stewart, MD<sup>b</sup>, Xing Sheng Yang, MD, PhD<sup>a</sup>, Robert O. Donnell, MD<sup>a</sup>, Angel R. Leon, MD<sup>a</sup>, Joel M. Felner, MD<sup>a</sup>, James D. Thomas, MD<sup>b</sup>, and John D. Merlino, MD<sup>a</sup>

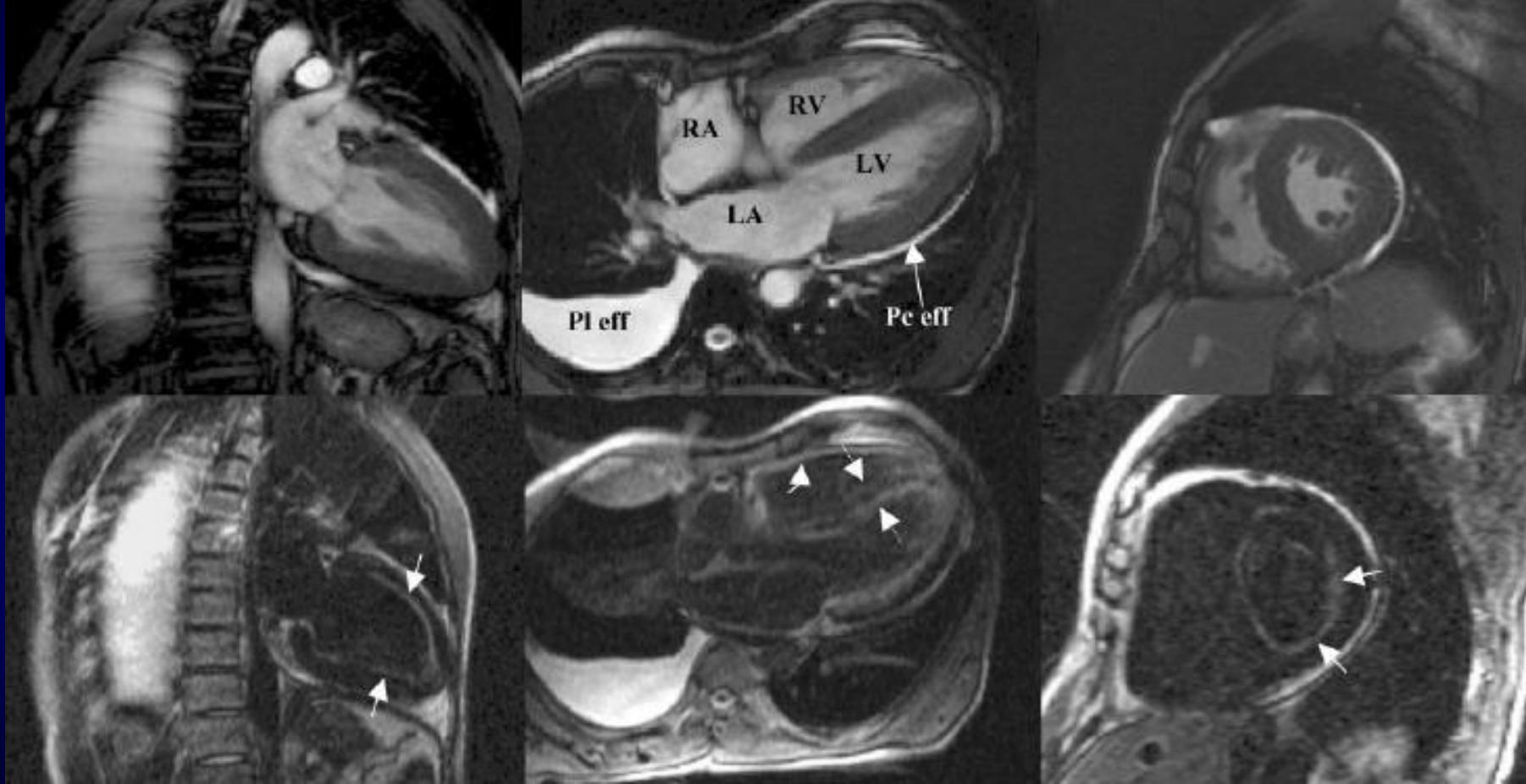


**B**



# MRI in cardiac amyloidosis

Role of Gadolinium contrast-enhanced MRI



global subendocardial late enhancement

Maceira et al., Circulation 2005



# Impact of cardiac stage

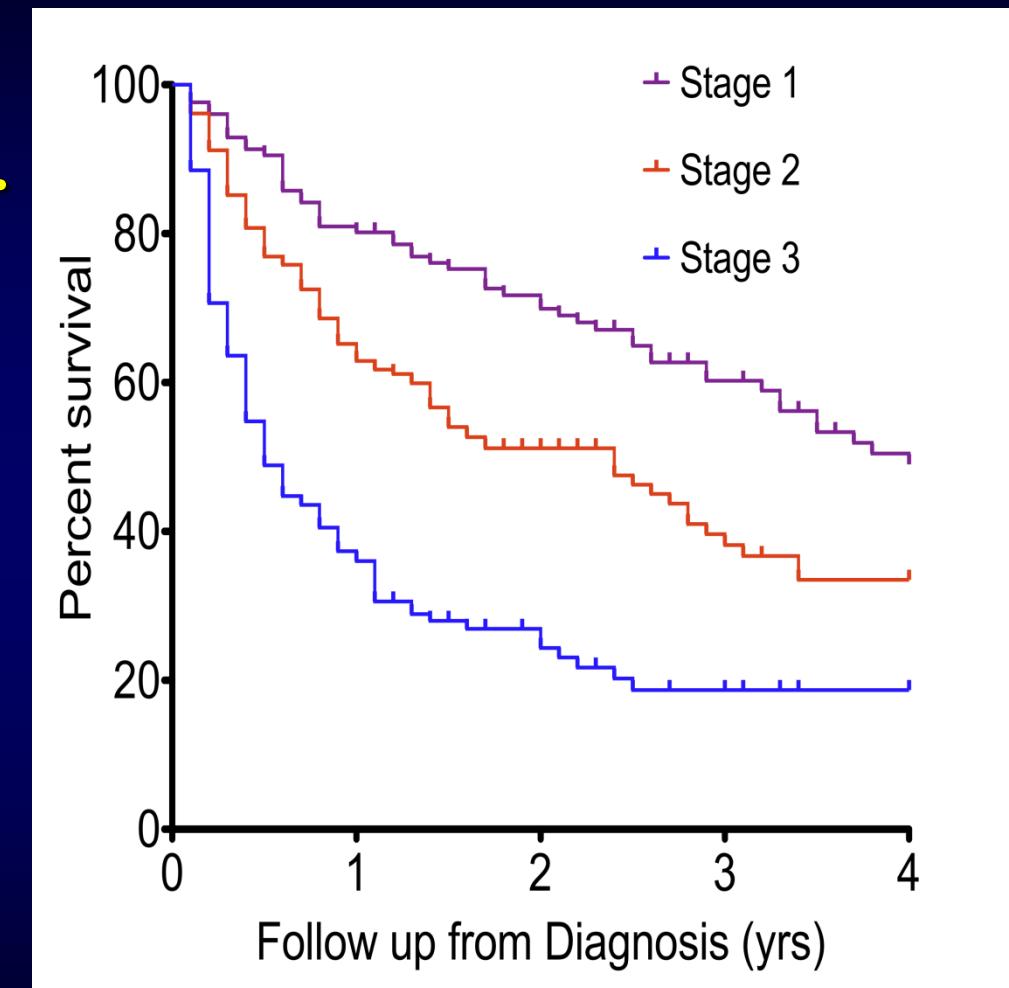
**Troponin T < 0.035 ug/L**

**NT-proBNP < 332 ng/L**

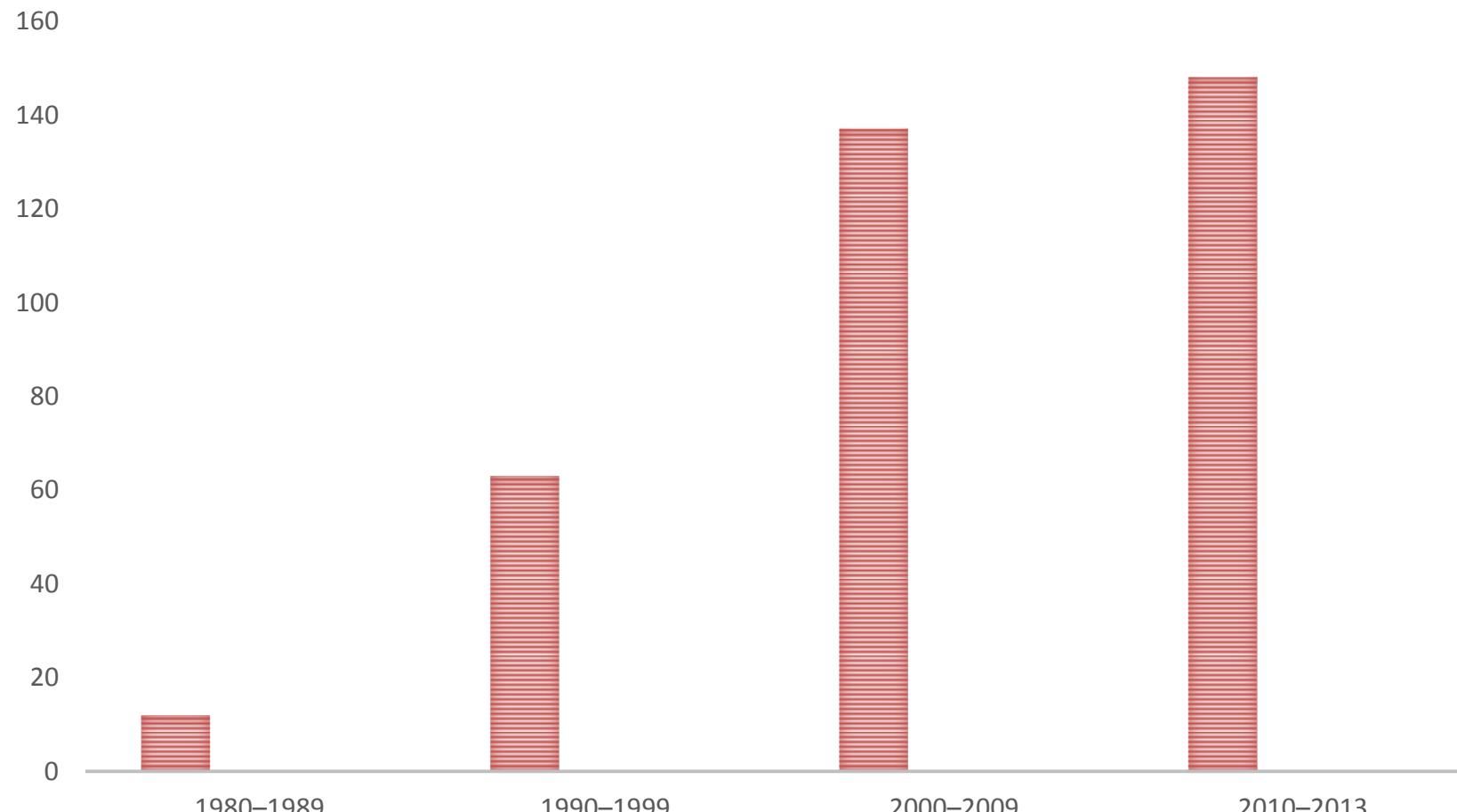
**Stage 1: Neither high**

**Stage 2: Either high**

**Stage 3: Both high**



# Διάγνωση wtTTR καρδιακής αμυλοείδωσης: Mayo Clinic

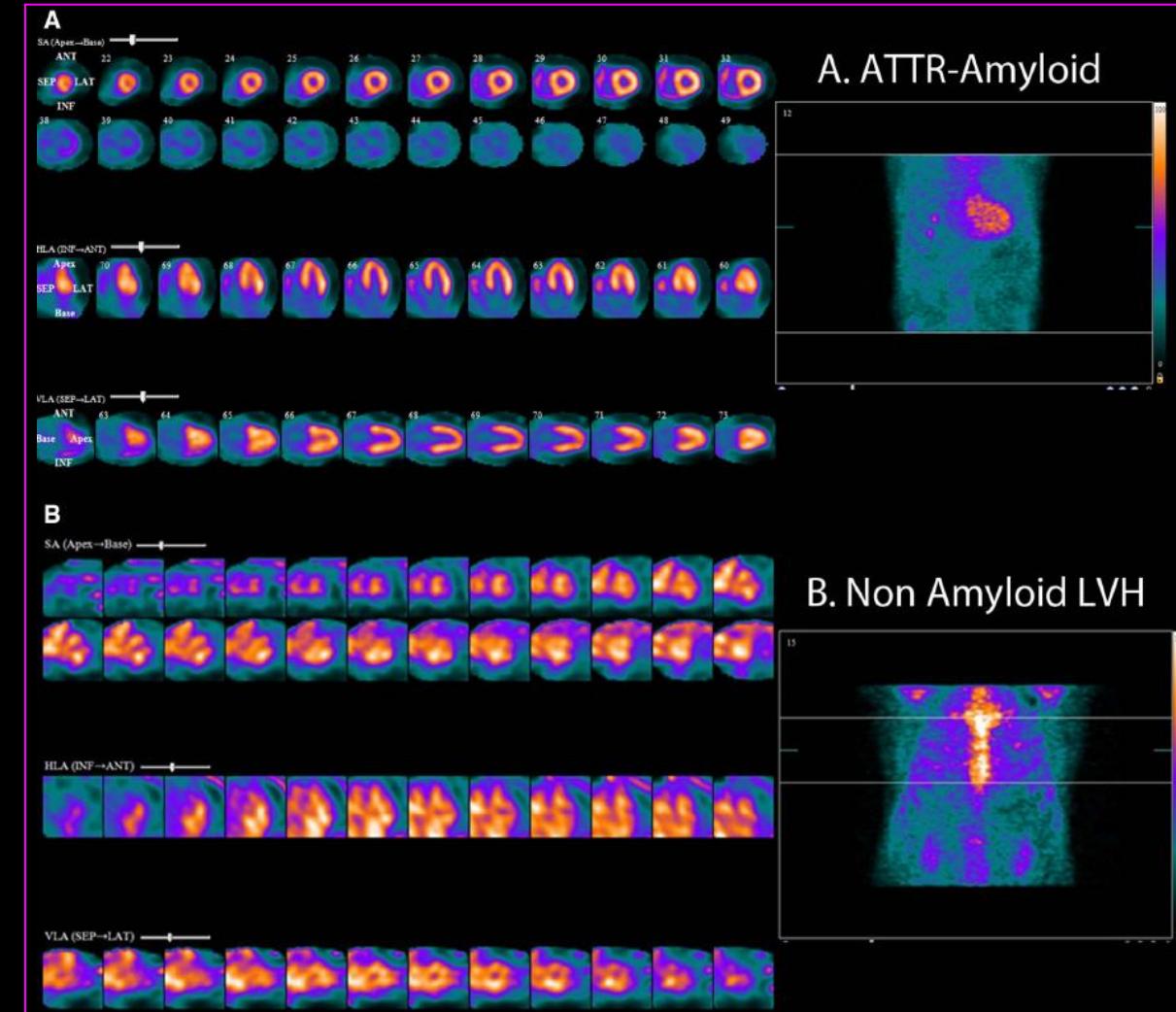




# Radionuclide imaging of cardiac amyloidosis

Tc-99m pyrophosphate single-photon emission computed tomography

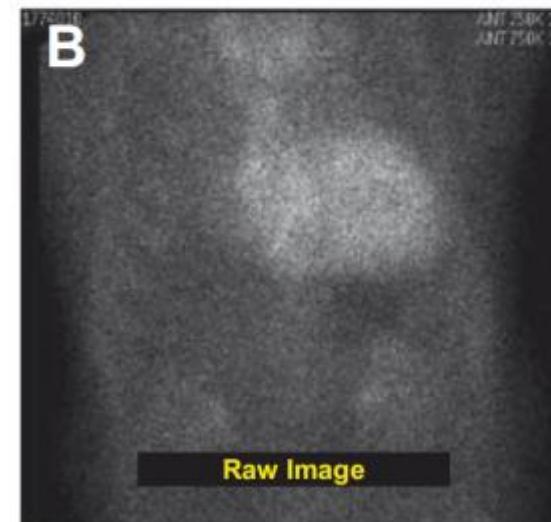
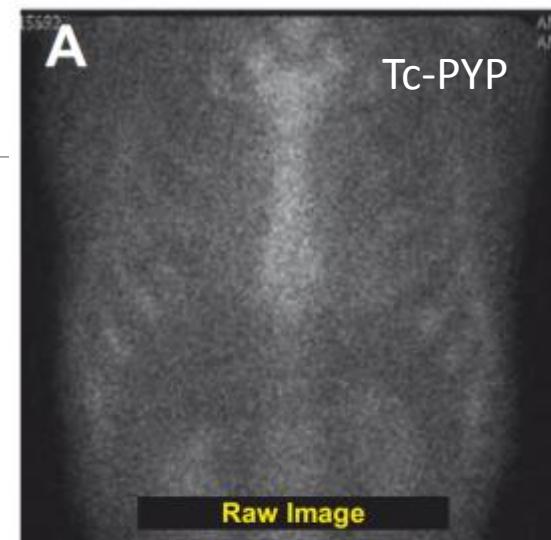
Ευαισθησία 97%  
Ειδικότητα ~100%  
για ATTR έναντι AL καρδιακή αμυλοείδωση



Falk et al. Circ Cardiovasc Imaging 2014

## Μη επεμβατική τυποποίηση: Σπινθηρογράφημα με Tc99<sup>m</sup>-DPD ή Tc99<sup>m</sup>-PYP για αμυλοείδωση από τρανσθυρετίνη

AL      Tc-DPD      ATTR



# Aortic stenosis and transthyretin cardiac amyloidosis: the chicken or the egg?

