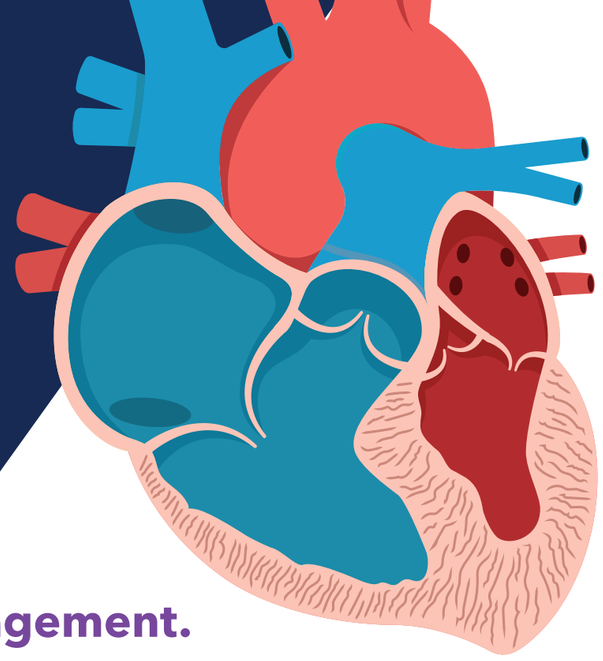
RENEWED FOCUS ON CARDIAC AMYLOIDOSIS

Meeting Key Clinical Challenges



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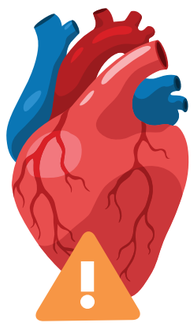
Cardiac amyloidosis is more common than previously thought – affecting **5-15%** of at-risk populations (HFpEF, aortic stenosis).

Take steps to ensure early diagnosis and proper management.

1 Recognize and look for clinical clues that suggest cardiac amyloidosis.

Cardiac



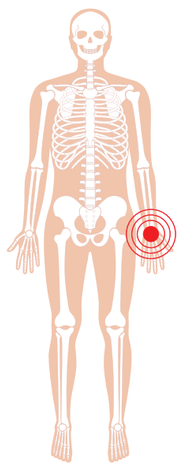
- Heart failure symptoms
- Atrial fibrillation
- Bradyarrhythmias/conduction problems/pacemaker

Specific echo variables

- Left ventricular hypertrophy/discordant voltage on ECG
- Decreased global longitudinal strain, often with apical sparing

Noncardiac manifestations

Musculoskeletal/neuropathy



- Bilateral carpal tunnel in patients 60+ ← Most common
- Lumbar spinal stenosis
- Ruptured tendon(s), joint replacements
- Peripheral neuropathy
- Muscle weakness, falls

Autonomic dysfunction

- Orthostatic hypotension
- Nausea, vomiting, diarrhea, weight loss
- Erectile dysfunction
- Urinary retention

2 Ensure proper diagnosis by ordering the right tests.

First **rule out** immunoglobulin light chain **(AL) amyloidosis** to then **rule in** transthyretin **(ATTR) amyloidosis.**

Monoclonal protein found?
Assess for monoclonal protein
Serum kappa/lambda free light chain and Serum/urine IFE

- **YES** → Indicative of light chain **(AL) amyloidosis** → **Medical emergency**
  Promptly refer to **hematology/oncology**
  Chemotherapy +/- SCT
- **NO** → Order radionucleotide scintigraphy **Grade 2/3 uptake?**
  - **NO** → **Cardiac amyloidosis unlikely**
  - **YES** → Indicative of transthyretin **(ATTR) amyloidosis**
    → Genetic testing to identify variant vs. wild-type form

i Note monoclonal protein screening and nuclear scan are often ordered together.

3 Prescribe appropriate treatments.

Treatments for ATTR are designed to:

Stop amyloid production in the liver	Stabilize misfolded protein	Remove related heart damage
FDA-approved TTR silencers* • Eplontersen, patisiran, and vutrisiran for variant transthyretin amyloidosis with neuropathy • Vutrisiran for transthyretin cardiac amyloidosis	**Transthyretin stabilizers*** (tafamidis and acoramidis)	**Depletion therapies** in clinical trials
All agents → Slow disease progression, but don't reverse damage → Preserve functional capacity and quality of life → Reduce risk of hospitalization and mortality		**Cardiac replacement** Heart transplant in selected patients
Gene editing in clinical trials		

*No evidence of superiority of these medications over each other or benefit with combination therapy.

Other considerations for rapidly changing field:

Regular cardiology follow-up

Support healthy lifestyle - limiting salt, exercise

High medication costs/ inadequate coverage

For information to share with your patients, visit ***CardioSmart.org/CardiacAmyloidosis***