Expanded Non-Ischemic Heart Failure Work-Up

Society of Hospital Medicine

Systematic evaluation when CAD is excluded as the primary etiology. Early identification of treatable causes, particularly cardiac amyloidosis, can dramatically alter management and prognosis.

Comprehensive History For Etiology

Family History:

- ☐ Cardiomyopathy / Sudden cardiac death <50 years
- ☐ Heart transplant / ICD/pacemaker
- ☐ Neuromuscular disease / Genetic syndromes

Toxic Exposures:

- ☐ Alcohol: ___ drinks/day × ___ years (>7-8/day × 5y = alcoholic CMP)
- ☐ Cocaine / Methamphetamine / Anabolic steroids
- ☐ Heavy metals (lead, cobalt)

Cardiotoxic Treatments:

- ☐ Anthracyclines: Agent ___ Dose ___ mg/m² (risk → >400 mg/m²)
- ☐ Trastuzumab / HER2-targeted therapy
- ☐ Immune checkpoint inhibitors
- ☐ Chest/mediastinal radiation: ___ Gy

Inflammatory/Infectious:

- ☐ Recent viral illness
- ☐ HIV / Hepatitis B/C / Chagas / Lyme / TSH
- ☐ Autoimmune disease (SLE, RA, scleroderma, sarcoid)

Other:

- ☐ Pregnancy within 5 months / Prior peripartum CMP
- ☐ Neuromuscular symptoms (weakness, gait abnormalities)
- ☐ Tachy mediated, PVC mediated, stress-induced CMP.

Amyloidosis Red Flags Assessment

≥2 cardiac or ≥1 cardiac + extracardiac flags → trigger workup. ATTR affects 13% of Patients with HFpEF and unexplained LV thickening.

Cardiac Red Flags:

- ☐ HFpEF with unexplained LV wall thickening ≥12mm
- ☐ Low-voltage ECG despite thick walls
- ☐ Disproportionate troponin/NT-proBNP elevation
- ☐ Restrictive filling / Biatrial enlargement
- ☐ Intolerance to standard HF medications

Extracardiac Red Flags:

- ☐ Bilateral carpal tunnel syndrome
- ☐ Lumbar spinal stenosis / Biceps tendon rupture
- ☐ Autonomic neuropathy / Peripheral neuropathy
- ☐ Proteinuria / Macroglossia / Periorbital purpura
- ☐ Total flags: Cardiac ___/6 Extracardiac ___/5
- ☐ Amyloidosis workup indicated: Yes / No

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Specialized Laboratory Testing

Amyloidosis Panel:

- ☐ SPEP / UPEP / Serum free light chains / Immunofixation
- ☐ Monoclonal protein detected: Yes / No
- ☐ PYP scan: Grade 0 / 1 / 2 / 3 (Grade 2-3 without M-protein = >99% specific for ATTR)
- ☐ TTR genetic testing (hereditary ATTR)

Other Workup:

- ☐ Ferritin/TSAT for hemochromatosis (>45% TSAT)
- ☐ HIV / HepB / HepC / Chagas / Lyme
- ☐ ANA / anti-dsDNA / ACE level / ESR / CRP / TSH / Urine drug screen

Advanced Imaging

- ☐ Cardiac MRI indicated: Yes / No
- ☐ LGE pattern: Subendocardial / Mid-wall / Epicardial / Diffuse / Patchy
- ☐ T1/T2 mapping / ECV / T2* (iron)
- ☐ Coronary evaluation: Angiography / CCTA
- ☐ Endomyocardial biopsy if: Unexplained CMP + hemodynamic instability, suspected GCM, differentiate AL vs ATTR

Genetic Testing And Referrals

- ☐ Genetic counseling offered / Panel ordered (DCM/HCM/ARVC/TTR)
- ☐ Referral to: HF specialist / Amyloid center / Advanced HF / EP / Genetics

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