TAKE ACTION

Because early detection and intervention are critical to slow disease progression[1,2]

Establish a diagnosis in 3 steps[1-7]

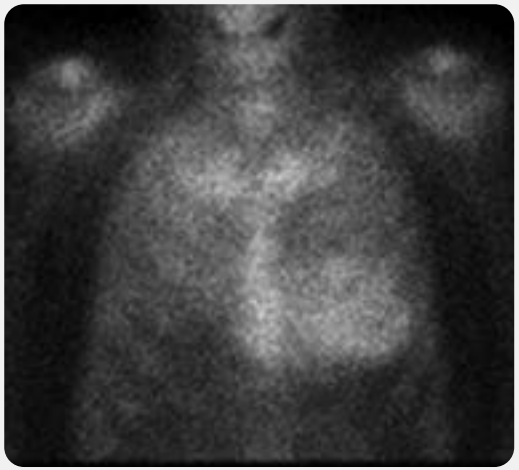
1. **Rule out AL amyloidosis** with simple monoclonal light-chain assays
2. **Detect amyloid deposition** in myocardial tissue with nuclear scintigraphy or tissue biopsy
3. **Use genetic testing** to determine if ATTR-CM is hereditary

Learn more about diagnosing ATTR-CM

NUCLEAR SCINTIGRAPHY, CARDIAC BIOPSY, AND GENETIC TESTING CAN HELP CONFIRM AN ATTR-CM DIAGNOSIS[1,2]*

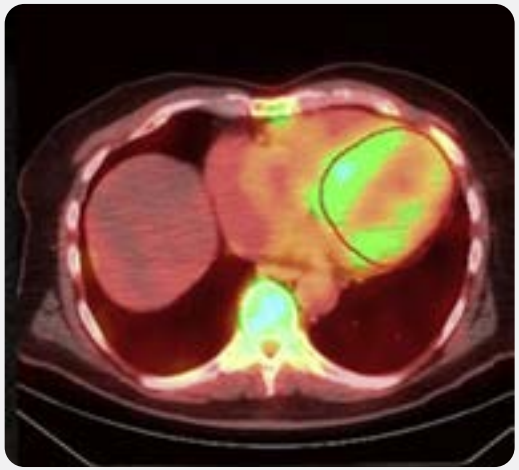
Nuclear scintigraphy is a **noninvasive diagnostic** that can detect amyloid presence in the heart.[3-5]

Planar imaging



^{99m}Tc-PYP planar scan in a patient with wtATTR-CM: **Grade 3** cardiac uptake, H/CL ratio 1.8 at 3 hours[8]

SPECT



In the same patient, SPECT **confirmation of radiotracer uptake in myocardium**[8]

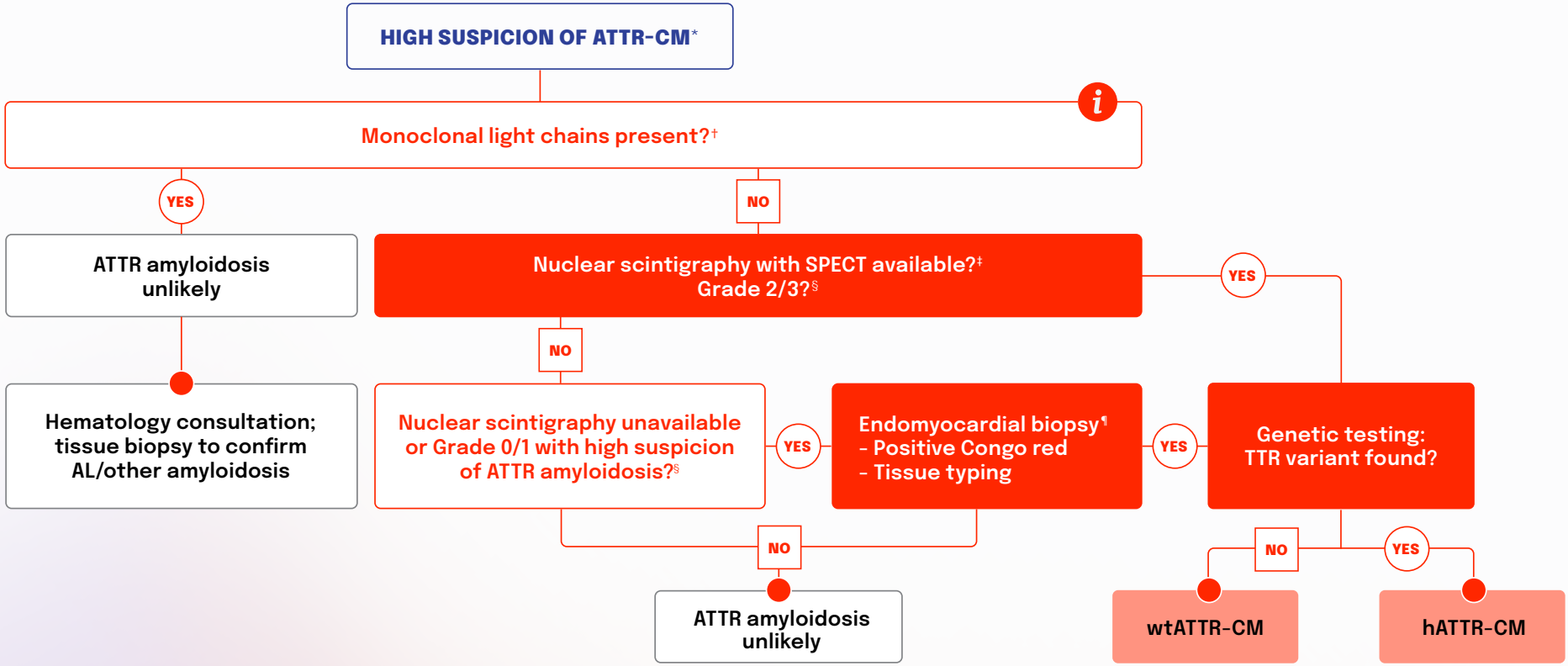
Diagnosis is based on the independent medical judgment of the healthcare professional.
Images reproduced with permission from Hanna et al.

*Not a comprehensive list of all diagnostic tools.

^{99m}Tc-PYP=technetium-99m-pyrophosphate; AL=amyloid light chain; ATTR-CM=cardiomyopathy of transthyretin-mediated amyloidosis; H/CL=heart-to-contralateral lung; SPECT=single-photon emission computed tomography; wtATTR-CM=cardiomyopathy of wild-type transthyretin-mediated amyloidosis.

DIAGNOSING ATTR-CM

Follow the diagnostic algorithm for ATTR-CM[1,2]



Diagnosis is based on the independent medical judgment of the healthcare professional. Adapted from: Kittleson et al and Kittleson et al.[1,2]

*Based on signs, symptoms, and initial findings consistent with ATTR amyloidosis.[1,2]
†The 2023 American College of Cardiology Expert Consensus recommends serum and urine immunofixation electrophoresis and serum free light chain assay to exclude AL amyloidosis in the initial diagnostic workup.
‡Consider biopsy if scan is negative/equivocal but clinical suspicion is high.
§Grade 0: no cardiac and normal rib uptake; Grade 1: cardiac<rib uptake; Grade 2: cardiac=rib uptake; Grade 3: cardiac>rib uptake with mild/absent rib uptake.
¶Sensitivity of a non-endomyocardial biopsy varies by site; negative fat-pad biopsy is not sufficient to exclude ATTR amyloidosis.

ATTR=transthyretin-mediated amyloidosis; hATTR-CM=cardiomyopathy of hereditary transthyretin-mediated amyloidosis; TTR=transthyretin.

References: **1**. Kittleson MM, et al. *Circulation*. 2020;142(1):e7-e22. **2**. Kittleson MM, et al. *J Am Coll Cardiol*. 2023;81(11):1076-1126. **3**. Gillmore JD, et al. *Circulation*. 2016;133(24):2404-2412. **4**. Ruberg FL, et al. *Circulation*. 2012;126(10):1286-1300. **5**. Dharmarajan K, et al. *J Am Geriatr Soc*. 2012;60(4):765-774. **6**. Maurer MS, et al. *Circ Heart Fail*. 2019;12(9):e006075. **7**. Ando Y, et al. *Orphanet J Rare Dis*. 2013;8:31. **8**. Hanna M, et al. *J Am Coll Cardiol*. 2020;75(22):2851-2862.

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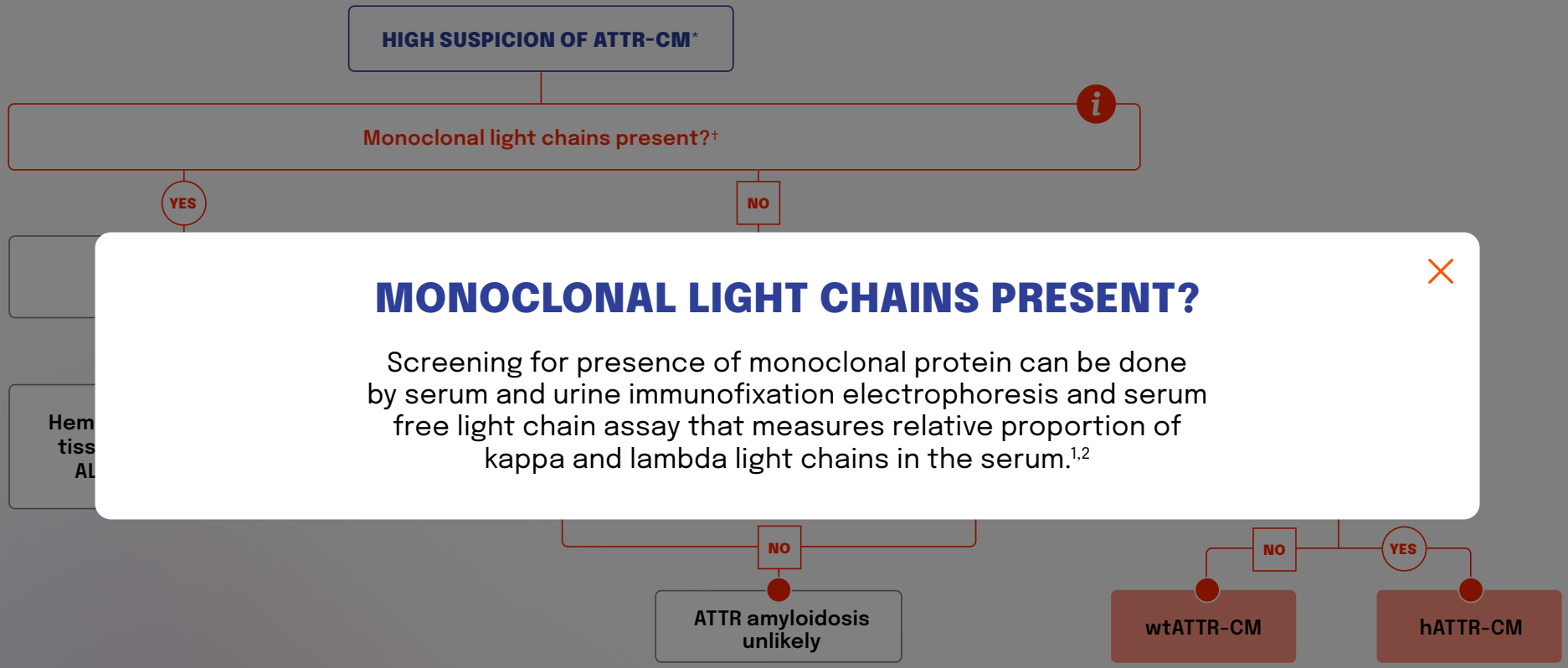
DIAGNOSING ATTR-CM

Follow the diagnostic algorithm for ATTR-CM[1,2]



MONOCLONAL LIGHT CHAINS PRESENT?

Screening for presence of monoclonal protein can be done by serum and urine immunofixation electrophoresis and serum free light chain assay that measures relative proportion of kappa and lambda light chains in the serum.[1,2]

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