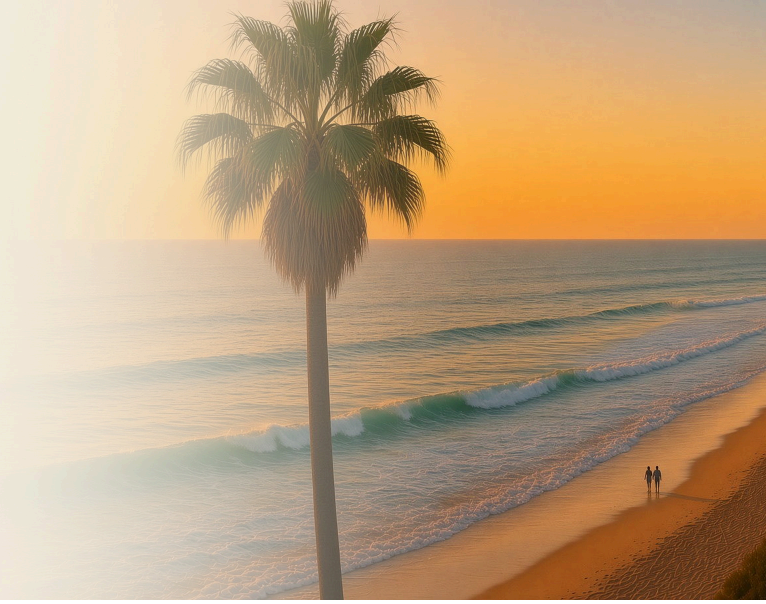
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ATTR Cardiac Amyloidosis

A liver protein that piles up in the heart with age. The early clues, the tests and the drugs that now slow it.

1 in 7
is roughly how many older adults with HFpEF turn out to have ATTR amyloid

~1 in 3
people in their 70s having carpal tunnel surgery had amyloid in the wrist tissue

About 90%
of older patients have the wild-type form, which is not inherited

WHY IT GETS MISSED

The body often shows clues years before the heart

Wrist
Carpal tunnel, often in both hands

Lower back
Lumbar spinal stenosis, pain and numbness walking that ease on sitting or leaning forward

Shoulder and arm
Biceps tendon that tears on its own, or a rotator cuff tear out of proportion to the activity

Then the heart
Short of breath, swollen ankles, thick heart walls on echo, pumping number normal or near normal

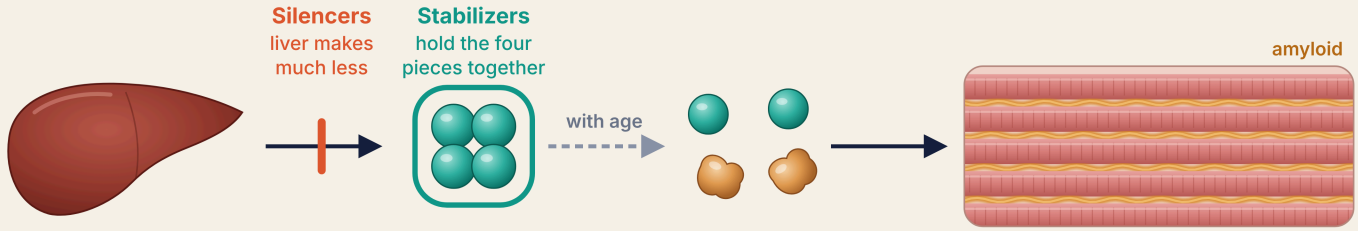
Amyloid protein builds up in these tissues, often for 10 or 15 years before the heart

Carpal tunnel surgery on both hands, 5 to 10 years before heart symptoms

It looks like ordinary heart failure with preserved ejection fraction (HFpEF), where the pumping number on the echo is normal or near normal. Men are affected far more often than women, and the chance climbs sharply into the late seventies and eighties.

WHAT GOES WRONG

A liver protein that folds wrong with age



The liver makes transthyretin (TTR)

A four-piece assembly doing its normal job in the blood

Pieces come apart and fold wrong

Amyloid piles up in heart muscle and the walls get thick and stiff

In wild-type ATTR the gene is normal and the protein simply becomes less stable with age. Stabilizer pills hold the four-piece assembly together, and silencer drugs make the liver produce much less of it.

Found early, treated early

Tafamidis helped most in patients who started it earlier in the disease, which is the main reason to look for amyloid early. Treatment can't reverse the deposits already there, and it does meaningfully slow the disease.

HOW IT'S CONFIRMED AND TREATED IS ON THE BACK

DIAGNOSIS AND TREATMENT

Confirming it, treating it and living with it

HOW IT'S CONFIRMED

In the right setting, no biopsy is needed

1 Echo and EKG clues
Thick walls on the echo with small voltages on the EKG. That mismatch is one of the cleanest signals.

2 Rule out AL amyloid
Blood and urine tests look for AL amyloid, a rarer, faster kind from the bone marrow that needs very different treatment.

3 PYP scan
A tracer goes in through an IV, and a few hours later you lie on a scanner for about twenty minutes. Clean AL tests plus a strongly positive scan confirm ATTR.

4 Gene test
A blood sample checks the TTR gene. If it carries a mutation, children and siblings may want testing themselves.

TREATMENTS

slow the disease

Tafamidis (Vyndamax, Vyndaqel)	In a trial of this stabilizer pill in 441 patients over 30 months, people on it lived longer, had fewer heart failure hospital stays and walked farther.
Acoramidis (Attruby)	A second stabilizer pill, approved by the FDA in November 2024. In about 600 patients over 30 months it lowered a combined measure of death and heart-related hospital stays.
Silencers	Patisiran, vutrisiran and eplontersen were first approved for the nerve form of hereditary ATTR. Vutrisiran was approved for the heart form in March 2025. Patisiran was declined for it in 2023, and eplontersen's heart trial is under way.
Everyday heart failure care	Water pills (diuretics) keep fluid off. Beta blockers and some blood pressure pills are used carefully, often at lower doses, since a stiff heart depends on its rate and blood pressure.

DAY TO DAY

Salt	A salty meal can bring on a fluid flare-up. Most of Dr. Rasch's amyloid patients aim for under 2,000 mg of sodium a day.
Exercise	Walking, light cycling and moderate activity you can keep up without severe breathlessness are reasonable. Heavy weights and high-intensity intervals are usually too much.
Heart rhythm	AFib is common and may need a blood thinner. Some patients develop slow conduction and need a pacemaker, which routine EKGs and rhythm monitoring track.
Family	The wild-type form is not inherited. In hereditary ATTR each child has a 50 percent chance of carrying the mutation, and genetic counseling should be discussed. The Val122Ile variant is found in roughly 3 to 4 percent of African American adults.

WHEN TO CALL

Call 911	Fainting, or breathlessness at rest.
Same day	A gain of about 2 to 3 pounds in a day or 5 in a week, worse swelling, or dizziness on standing.

WILL THE DRUGS MAKE ME FEEL BETTER?

Most patients don't notice a dramatic change. These drugs slow the disease, and over several years people on them have fewer hospital stays and live longer than people on placebo. Water pills and rate control are what ease day-to-day symptoms.

READ THE FULL ARTICLE

damianrasch.com/attr-older-adults

For education only, and not a substitute for advice from your own physician. Sources include the tafamidis (NEJM 2018), acoramidis and vutrisiran (NEJM 2024) trials, the 2023 ACC amyloidosis consensus pathway and the 2023 ESC cardiomyopathy guidelines.

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