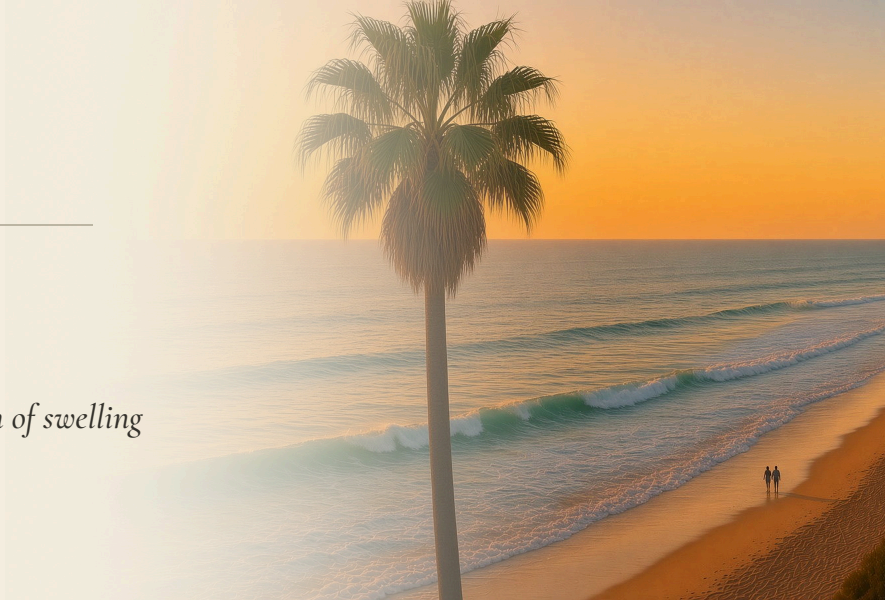
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Leg Swelling

The heart is only one possible cause. How the pattern of swelling points to the right one, and when it can't wait.

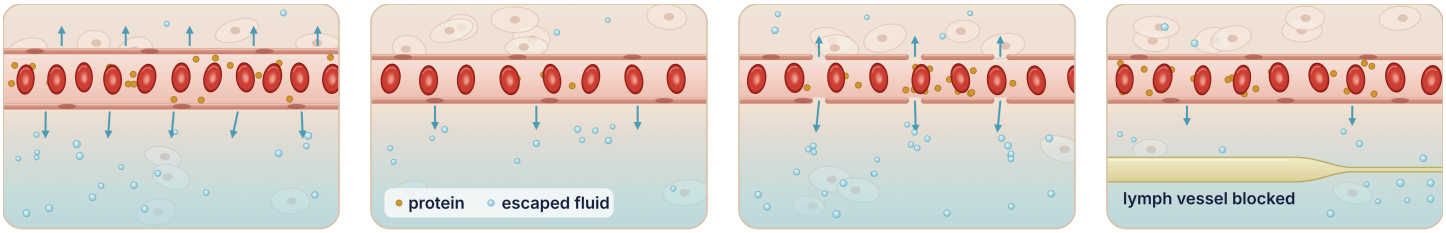
3–5 lb
gained in a few days with swelling can mean heart failure is worsening

10 seconds
of firm finger pressure on the shin shows whether the swelling pits

Same day
call for new swelling in one leg, which can mean a blood clot

WHY LEGS SWELL

Fluid leaks out of the smallest blood vessels



1 Backed-up pressure
Heart failure, vein problems, a clot or pregnancy

2 Too little protein
Kidney or liver disease, severe malnutrition

3 Leaky vessel walls
Infection, inflammation, allergic reactions

4 Blocked drainage
Lymphedema, after surgery, radiation or infection

All swelling comes from fluid leaking out of capillaries into the tissue around them, and four things can tip the balance toward leaking. Most leg swelling comes from the first one, backed-up pressure, which is why so many of the causes involve the heart and blood vessels. A careful history, an exam and a few focused tests usually show which one is at work.

WHEN IT'S THE HEART

Heart-related swelling has a pattern

Both legs, and it pits
The swelling is even on both sides. Press a finger firmly into the front of the shin for ten seconds, and a dent stays for seconds to minutes.

Worse as the day goes on
It's often worst by evening and better after a night lying flat. It usually starts in the feet and ankles and climbs the calf as fluid builds.

Rarely the only symptom
Fluid also gathers in the lungs, so there's usually breathlessness with exertion, trouble breathing lying flat, weight gain, poor appetite and fatigue.

Heart failure is the most common heart cause. Others include failure of the right side of the heart, a badly leaking tricuspid valve and a scarred, stiff sac around the heart (constrictive pericarditis).

One leg is different

One leg much more swollen than the other, especially with calf pain, tenderness or warmth, can mean a blood clot (a deep vein thrombosis). Call your doctor and get an ultrasound the same day.

SORTING IT OUT

When to get help, and other causes

CALL 911 OR GO TO THE ER

leg swelling with any of these

Sudden breathlessness or chest pain	Can mean a clot in the lungs or a heart attack.
Severe pain, coolness or color change in one leg	Can mean blood flow to the leg is blocked, or a large clot.
Pink, frothy sputum	Can mean fluid flooding the lungs.
Fever with severe, rapidly spreading redness	Can mean a rare but dangerous deep infection.
Pregnant with a seizure or BP 160/110 or higher	Can mean severe preeclampsia or eclampsia.

CALL YOUR DOCTOR THE SAME DAY

New swelling	In one leg, or in both legs with breathlessness or weight gain over a few days, or swelling with redness, warmth and tenderness.
Fast or unexplained	Swelling that's getting worse quickly with no obvious cause.
Pregnant or recently delivered	Any swelling in pregnancy, especially in one leg. Breathlessness, trouble breathing lying flat or a racing heart, in pregnancy or up to 6 months after delivery.
If you have heart failure	If your weight and swelling go up, call your cardiologist before taking extra water pills. If the extra dose doesn't bring your weight back down within a few days, you need to be seen.

BOOK A VISIT WITHIN A WEEK OR TWO

Stable swelling	Mild swelling in both legs that's slowly worsening, new swelling with stable heart failure, swelling you suspect comes from a medication, or worsening vein skin changes.

COMMON CAUSES BESIDES THE HEART

Vein problems	The most common cause of swelling in both legs. Worn valves in the leg veins let blood pool. Look for brownish skin around the ankles or varicose veins. Compression stockings, raising your legs and weight loss help.
Medications	Amlodipine, nifedipine, pioglitazone, gabapentin, pregabalin, anti-inflammatory pain relievers (NSAIDs), steroids and some hormone therapies. It usually clears within days to weeks of stopping the drug.
Kidney or liver disease	Too little protein in the blood lets fluid leak. Foamy urine points to the kidneys. Yellowing skin and a swollen belly point to the liver.
Clot or skin infection	Usually one leg. A clot often brings calf pain or tenderness. A skin infection (cellulitis) is warm, red and tender, often with a fever.
Lymphedema or thyroid	Swelling that barely dents when pressed. Lymphedema can follow surgery, radiation or infection. A severely underactive thyroid causes a similar swelling.

SWELLING ON AMLODIPINE?

It's usually harmless and tracks with the dose, from about 2 in 100 people at 2.5 mg to 11 in 100 at 10 mg, more often in women. Don't stop it on your own. Your prescriber can lower the dose, add an ACE inhibitor or ARB, or switch drugs. A water pill won't fix it.

READ THE FULL ARTICLE

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leg-swelling-edema

For education only, and not a substitute for advice from your own physician. Sources include the 2022 AHA/ACC/HFSA heart failure guideline, the 2020 ASH blood clot guidelines, the 2011 SVS/AVF venous disease guidelines, Trayes et al. (AFP 2013), the amlodipine label and the 2019 ESC pulmonary embolism guidelines.

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