What is the differential diagnosis of chronic leg edema in primary care?

**Evidence-based answer**
The differential diagnosis, in descending order, includes: elevated pulmonary artery pressure (often due to obstructive sleep apnea), congestive heart failure, idiopathic causes, venous insufficiency, use of nonsteroidal anti-inflammatory drugs (NSAIDs), and proteinuria (>1 g daily) (strength of recommendation: B, based on a nonconsecutive diagnostic cohort study with good reference standards).

**Clinical commentary**
Test for DVT in those with unilateral leg edema
Based on presented evidence, it is premature to make the initial diagnosis of venous insufficiency without further evaluation through cardiovascular testing in patients >45 years of age.

Though this Clinical Inquiry is very convincing, I recommend cautious interpretation of this data due to the relatively small sample size, type of study, and demographics of the study population. A final note: remember to exclude pregnancy in women of reproductive age, and consider tests to exclude deep venous thrombosis in patients presenting with unilateral leg edema.

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**Evidence summary**
Chronic leg edema is defined as palpable swelling caused by an increase in interstitial fluid volume lasting at least 72 hours.¹

We were able to find only 1 moderate-quality study regarding the diagnosis of bilateral lower extremity edema that included a thorough cardiovascular evaluation.

**Single study in bilateral leg edema: What the FPs thought...**
A nonconsecutive cohort study² evaluated the causes of bilateral leg edema among 58 ambulatory adults (between 29 and 83 years of age) enrolled from an inner-city family medicine clinic in Cleveland. Edema was present for >3 months in 78% of patients, and 84% were obese. Patients were excluded if the edema was known to be due to nifedipine, intraabdominal malignancy, hypothyroidism, or idiopathic cyclic edema.

Family physicians obtained a history and performed a physical exam on all patients and recorded a clinical diagnosis for the edema. Initial clinical impressions included: venous insufficiency (71%), congestive heart failure (18%), nephrot-
The most common DXs for patients with leg edema were pulmonary hypertension, congestive heart failure, and idiopathic edema.