Ramipril for claudication?
This ACE inhibitor can help patients with peripheral artery disease walk longer while remaining pain free.

PRACTICE CHANGER
Consider prescribing ramipril for patients who have intermittent claudication.¹

STRENGTH OF RECOMMENDATION
A: Based on a high-quality placebo-controlled randomized controlled trial (RCT) consistent with prior RCTs.

ILLUSTRATIVE CASE
A 63-year-old man presents with pain in both legs, which starts with activity and resolves with rest. He has a resting blood pressure of 135/77 mm Hg consistent with past measurements, and an ankle-brachial index (ABI) <0.90, which is consistent with peripheral artery disease (PAD). His daily medications are 81 mg aspirin, 25 mg hydrochlorothiazide, and 40 mg simvastatin. What additional agent could be added for his symptoms?

PAD, defined as an ABI <0.9, affects approximately 5% of Americans older than 40 years. About two-thirds of those with PAD are asymptomatic; the remaining third suffer from intermittent claudication (IC).²

Exercise and smoking cessation are effective at reducing IC symptoms, as well as the long-term cardiovascular event risk associated with PAD.³ But even with these lifestyle changes, patients with PAD are often troubled by persistent symptoms.

Few evidence-based treatments for IC
Compared with placebo, the antiplatelet agents indobufen and picotamide have been shown to improve pain-free walking distance (PFWD).⁴ So have cilostazol⁵ and naftidrofuryl,⁶ as well as lipid-lowering agents.⁷

In a pilot study of 40 patients, 10 mg ramipril was shown to improve pain-free walking time (PFWT) at 24 weeks by 227 seconds (95% confidence interval [CI]=175-278; P<.001). That represents a 164% increase from baseline, vs no change in PFWT at 24 weeks for the placebo group.⁸ A recent small (N=33), double-blinded RCT found similar improvements in maximum treadmill walking distance, PFWD, and patient-reported walking distance at 24 weeks with ramipril compared with placebo.⁹

In the HOPE study, a subsection of patients who were older than 55 years and had PAD were treated with a daily target dose of 10 mg ramipril for a mean of 4.5 years. Compared with placebo, ramipril reduced the primary outcome—cardiovascular mortality, myocardial infarction (MI), or stroke—by 25% (risk ratio=0.75; 95% CI, 0.61-0.92).¹⁰

In the study reported on here, Ahimastos et al took a closer look at ramipril.

STUDY SUMMARY
Patients on ramipril can walk longer pain free
The authors conducted a double-blind, randomized placebo-controlled trial evaluating the effectiveness of 10 mg/d ramipril for the improvement of maximum walk time (MWT) and PFWT in patients with PAD.¹ Eligible patients had an ABI <0.9 in at least one leg and a history of IC in at least one leg, with stable claudication symptoms and a stable medi-
Ramiplrol not only reduces cardiovascular mortality, MI, and stroke in patients with PAD, but is effective in improving patient-oriented outcomes such as duration of walking without developing intermittent claudication.

WHAT’S NEW
Evidence that ramiplrol improves patient-oriented outcomes
Ramiplrol not only reduces cardiovascular mortality, MI, and stroke in patients with PAD, but is effective in improving patient-oriented outcomes such as duration of walking without developing intermittent claudication.

References