

Mrs. R is doing fine...
without vasodilators



Intermittent claudication is a familiar clinical problem facing physicians with large geriatric caseloads. "Peripheral vasodilators" nylidrin (Arlidin), cyclandelate (Cyclospasmol),

papaverine (Pavabid, Cerespan, etc.), isoxsuprine (Vasodilan) and others have long been promoted for use in the management of this condition.

However, recent clinical evidence indicates that **vasodila-**

tors are not effective in the treatment of intermittent claudication,¹⁻⁸ while regular exercise **has** been shown to improve symptoms somewhat.^{3,9}

Peripheral vasodilators can't dilate vessels narrowed by atherosclerosis: cholesterol deposits and stenotic areas are major causes of peripheral insufficiency, and they are not affected significantly by these drugs.^{1,2}

Ischemic muscle is its own best vasodilator: the build-up of metabolites from poorly-perfused muscle causes these vessels to dilate maximally (and automatically) with exercise. Drugs add little or nothing to this natural response.^{1,2,4,5}

Vasodilator drugs could actually decrease flow to ischemic areas: because they act systemically, such drugs would dilate many vascular beds, potentially further reducing flow to the highly resistant vessels supplying ischemic limbs.^{2,4,5}

While short on therapeutic effect, the "vasodilators" can cause side effects, such as hepatotoxicity [papaverine(Pavabid, Cerespan, etc.)], postural hypotension [isoxsuprine(Vasolidan)], drowsiness [cyclandelate (Cyclospasmol)], and palpitation [nylidrin(Arlidin)].^{1,2,4}

References

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"Review of the clinical studies of vasodilator drugs in obstructive vascular disease reveals little substantive evidence to support their use. They are not effective in the treatment of either intermittent claudication or ischemic symptoms or signs at rest... No drug has been shown to

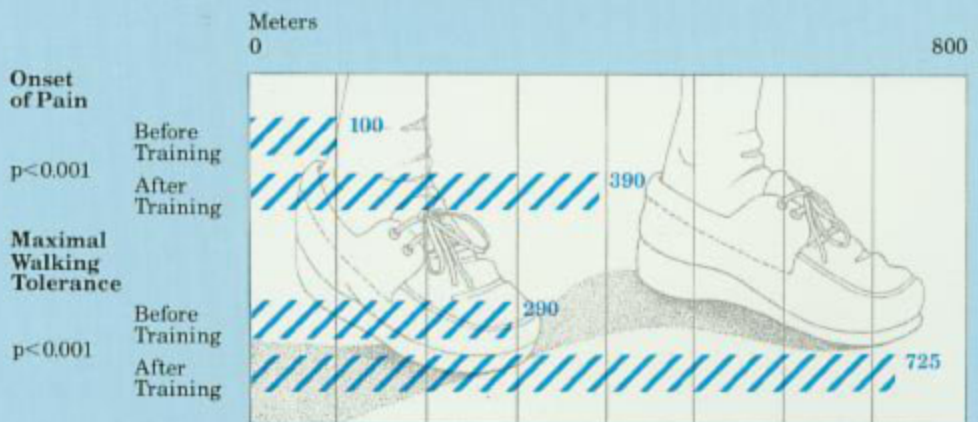
increase muscle blood flow during exercise when patients with intermittent claudication experience symptoms."⁵

(Coffman JD: *Drug Therapy: Vasodilator drugs in peripheral vascular disease*. *New England Journal of Medicine* 300:713-717, 1979.)

What's the Alternative?

Reports have appeared in the last few years demonstrating that **exercise can significantly improve symptoms in patients with intermittent claudication.**^{3,9} One team of Swedish physicians studied 148 subjects with peripheral vascular insufficiency.⁹ Patients took part in individualized programs of walking, running, dancing, and sports for 4 to 6 months. During training, exercise was stopped only for an excessive rise in pulse rate or anginal symptoms, **not** for leg pain. Here are their results:

Walking Tolerance in Patients with Claudication Before and After Exercise Training Program



Patients on the average **doubled** their walking tolerance. Improvement was independent of size or nature of vascular lesion, or presence vs. absence of diabetes.

Consider switching your claudication patients from vasodilator drugs to a program of graded, supervised exercise. Their symptoms (as well as their general health) may well improve... and you'll be saving them up to \$200.00 per year. That buys a lot of sneakers.



This information has been prepared by the Drug Information Program of Harvard Medical School, under the direction of Jerry Avorn, M.D. A brief pamphlet for laypersons, "Exercise and 'Bad Circulation,'" has been written for physicians to distribute to patients in explaining the material presented above. For copies (specify number desired), and for additional information, please write to the Drug Information Program, Harvard Medical School, 643 Huntington Avenue, Boston, MA 02115. The Drug Information Program is supported in part by grant No. HS03880 from the National Center for Health Services Research of the Public Health Service, Health.