

## TREATMENT

Although some would treat recurring phlebitis in Behçet's disease with anticoagulants, this strategy is controversial. Anticoagulant therapy may be inadequate in the treatment of Behçet's disease because of the likelihood of phlebitis recurring in the face of warfarin treatment. One approach is to initiate heparin along with chlorambucil 0.1 mg/kg/day and to stop the heparin after 3 months. Chlorambucil treatment of retinal vasculitis or CNS disease must usually be continued for 1 to 3 years, but at reduced levels after the first 6 months. With this regimen, serious phases of the disease are suppressed and fatalities and blindness are usually avoided.

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## LOWER-EXTREMITY ARTERIAL DISEASE: TIPS ON DIAGNOSIS AND THERAPY

The most common manifestation of lower-extremity atherosclerosis is intermittent claudication (IC), a disease more likely to occur—and have graver consequences—in patients who are diabetic or who smoke.

## IC VS PSEUDOCLAUDICATION

Many patients who present with symptoms that suggest vascular disease may have pseudoclaudication

caused by either lumbar canal stenosis, foraminal stenosis, or lumbar disk disease. Yet, the character and the location of the symptoms may be identical in both conditions: cramping sensation, fatigue, numbness, tingling.

Exercise provides an important differentiating feature. For example, symptoms of pseudoclaudication may develop during walking, but the distance to onset of symptoms may be variable. With IC, the distance to claudication is predictable. Patients with IC do not develop discomfort solely by standing, while patients with pseudoclaudication can experience discomfort simply by standing. Discomfort caused by IC is relieved if the patient stops walking and stands. The patient with pseudoclaudication, however, must sit down or change position, and 10 or 15 minutes may pass before relief of symptoms.

Although a thorough physical examination is important, in most cases a noninvasive circulatory study is necessary. For example, pulse volume recordings are obtained, which measure blood pressures and wave forms on the thigh, calf, ankle, and transmetatarsal region both at rest and during exercise on a 10-degree treadmill at 1.5 mph. Both resting and exercise studies must be obtained, because a patient can present with IC and normal resting pulses and still have atherosclerosis.

## MANAGEMENT

The single most important therapeutic intervention is smoking cessation. Patients who stop smoking reduce their risk of coronary disease morbidity and mortality by 50% after 2 years of abstinence, and after 20 years, their risk is equal to that of nonsmokers. Other complications also may be related to smoking. In a Mayo Clinic study, 11.4% of smokers with arteriosclerosis obliterans underwent amputation over 5 years; none of those who stopped smoking and were nondiabetic underwent amputation. Another study that followed IC patients for 7 years showed that none of the 11% who stopped smoking experienced ischemic rest pain. On the other hand, ischemic rest pain occurred in 16% of those who continued to smoke. After 10 years, survival among smokers was 46% compared with 82% among those who stopped smoking.

The second most important therapeutic intervention is an aggressive walking program: 40 minutes a day at a pace that brings on claudication within about one block. The patient should be instructed to walk a little further, stop, wait for the discomfort to pass, and then continue walking. A successful walking program can increase the

distance to onset of claudication fourfold to eightfold. Although most patients do not demonstrate objective improvement in waveform pressure ratios, clinical improvement is usually significant.

Anticoagulants and vasodilators are ineffective treatments for IC. Pentoxifylline increases red blood cell membrane flexibility, allowing the blood to more easily pass through a smaller vascular space. It does not alter the natural history of the disease. In a placebo-controlled study, even patients on placebo significantly increased their walking distances; those taking pentoxifylline increased the distance by only 25% more, which may not be clinically significant. Therefore, we recommend starting treatment with a walking program, and then initiating pentoxifylline if the walking program fails to achieve the desired effect.

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#### IMPACT OF IC

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Even if a patient can walk half a mile before IC develops, the condition is not benign. It may not interfere with the patient's life-style, but it may represent diffuse systemic atherosclerosis. The life expectancy among patients with IC decreases by 10 years overall, regardless of the degree of severity. The 5-year survival rate is 70% to 80%; the 10-year survival rate drops to 40% and only 26% of patients with IC survive for 15 years after the diagnosis is made.

Patients with diabetes are at greater risk of IC, and their mortality rate when the disease develops is considerably higher than that of nondiabetic patients. Among patients with diabetes, arteriosclerosis obliterans develops an average of 10 years earlier than it does in the nondiabetic population. Diabetic patients have a greater likelihood of tibial-peroneal disease than nondiabetic patients. The likelihood of superficial femoral artery disease is similar in both populations, but diabetic patients have less likelihood of occlusive aorto-iliac disease. After 6 years with IC, the mortality among nondiabetic patients is 25%, compared with 50% of the diabetic population.

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