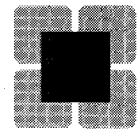

WILLIAM S. WILKE, MD, EDITOR

MEETING THE DIAGNOSTIC CHALLENGE OF BEHÇET'S DISEASE

Despite the graphic clinical signs of Behçet's disease, no pathognomonic diagnostic tests exist. Instead, we must rely on imperfect diagnostic criteria that include some of the commonest findings and that exclude other findings that may be important. One problem with the current diagnostic criteria is that disproportionate numbers of patients from Teheran and Istanbul were entered into the statistical analysis. Middle Eastern and Far Eastern patients have more severe ocular disease and less frequent central nervous system (CNS) disease than Northern European and American patients.

For a diagnosis of Behçet's disease, the patient must have three or more attacks of oral aphthous ulcers per year plus any *two* of the following four lesions: recurrent aphthous genital ulcerations; eye inflammations, including anterior or posterior uveitis, or retinal vasculitis; skin lesions, including erythema nodosum, papulopustular lesions, or vasculitis; or a positive pathergy test. Pathergy was defined as the development of a ≥ 2-mm erythema occurring 48 hours after forearm skin is pricked to a depth of 5 mm with a #21 needle. *To be valid, all the lesions must be observed by a clinician, and the eye inflammation must be observed by an ophthalmologist.*

These criteria have several limitations. The skin lesions are not unique to Behçet's disease. Furthermore, the pathergy test is rarely used in the West and its value is questionable. These criteria also do not include joint, CNS, and vascular involvement, all of which may be important.

DIAGNOSTIC FINDINGS

Oral ulcerations. Aphthous ulcers typical of Behçet's disease can occur anywhere inside the vermilion border of the lip, on the mucous membrane of the mouth, soft palate, and tongue. Behçet's ulcerations are painful—a finding that can help distinguish them from some painless ulcers that may occur in rheumatology and stomatology (mucosal ulcers in systemic lupus and Reiter's syndrome are usually shallow and painless). The Behçet's disease patient typically loses weight because of the pain caused by oral ulcers. Multiple ulcers, usually no larger than 6 mm in diameter, are the rule. The ulcerations last for 1 to 3 weeks and heal uneventfully, usually with no scarring. They occur in all patients with Behçet's disease.

Genital lesions. Genital ulcers occur in 75% of patient's with Behçet's disease, most commonly on the vulva or on the shaft or head of the penis. They are rare in the cervix and vagina. Occasionally, vasculitis is the cause of the ulceration, as shown on biopsy.

Ophthalmologic lesions. Eye lesions occur in at least 50% of patients with Behçet's disease. Anterior uveitis is characterized by inflammatory cells in the aqueous, and posterior uveitis is characterized by cells in the vitreous. Retinal involvement can result in blindness.

CNS involvement. CNS involvement affects some 30% of patients with Behçet's disease. The typical nervous system presentation is meningitis, characterized by headache, stiff neck, and fever. Other signs or symptoms of CNS involvement include paresis, blurred vision, and bilateral papilledema. A lumbar puncture shows cerebrospinal fluid with inflammatory cells. A cerebrospinal fluid pressure of 400 to 500 mm Hg indicates intracranial sinus occlusion, a characteristic manifestation of Behçet's disease. Magnetic resonance imaging is superior to computed tomography for diagnosis of CNS involvement.

Circulatory involvement. Venous lesions may present as recurrent superficial phlebitis or as deep-vein phlebitis. Anticardiolipin antibodies are rare, occurring in 15% to 20% of patients, and are generally associated with retinal vasculitis rather than with other manifestations. Arterial involvement also may occur. Behçet's disease should be considered in young men who present with pulsating masses in the extremities. The patient should be examined for mouth ulcerations. Hemoptysis in Behçet's disease indicates vasculitis of a pulmonary artery communicating with a bronchus. A pulmonary angiogram will disclose the presence and number of such aneurysms, perhaps allowing life-saving resection.

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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SUGGESTED READING

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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