with human immunodeficiency virus (HIV) infection. These HIV-associated syndromes may mimic the idiopathic varieties (e.g. Sjogren's syndrome, polymyositis, and systemic lupus erythematosis [SLE]), presenting difficult diagnostic and treatment dilemmas, and the implications of misdiagnosis are profound. Although the HIV-associated syndromes mimic idiopathic connective tissue disease, they develop from immunopathogenic mechanisms. The idiopathic varieties generally reflect overactivity of the immune system and respond to immunosuppressive treatment such as steroid therapy—an approach that would be disastrous in the setting of HIV infection.

To minimize the likelihood of misdiagnosis and inappropriate treatment, HIV detection tests are warranted for any patient with apparent connective tissue disease who is at risk for HIV, or who does not fit the characteristic patient profile.

The frequency of musculoskeletal symptoms in patients with HIV infection ranges from 40% to 72%, according to studies in New York, Cleveland, and Tampa. Most of these patients are in the final stages of HIV infection, and the musculoskeletal symptoms may be manifestations of chronic opportunistic infection. But certain syndromes warrant further evaluation.

ARTHRITIS

The triad of psoriasis, arthritis, and HIV has been observed in as many as 20% of patients seen in HIV clinics in certain areas. In some cases, this group of symptoms may have been the first manifestation of HIV infection.

It has been suggested, but not proven, that Reiter's syndrome is represented disproportionately in HIV-infected individuals, with a frequency of 10% to 20%. The syndrome is generally characterized by arthritis, ocular inflammation, and urethritis, but it encompasses a broad spectrum of disease, including spondylitis in HLA B27-positive individuals.

A mono- or oligoarticular arthritis has been reported. The arthritis is inflammatory and sterile, lasts from days to weeks, and affected patients are HLA B27-negative and have no distinguishing features other than HIV infection. Because there have been reports of opportunistic infections in joints, monoarticular arthritis that is inflammatory should be considered infectious until proven otherwise.

SJÖGREN'S SYNDROME

A syndrome that mimics idiopathic Sjögren's syndrome is being reported increasingly in HIV patients. A recent report from New York University noted that biopsies of minor salivary glands from patients with HIV-associated Sjögren's syndrome were indistinguishable by light microscopic analysis from idiopathic Sjögren's syndrome. Despite the histologic similarities, there are immunopathologic and clinical differences. Idiopathic Sjögren's syndrome is characterized by a hyperactive humoral limb and an infiltrate rich in CD4 cells. The infiltrate in HIV-associated Sjögren's syndrome is characterized by CD8 cells or cytotoxic T-suppressor cells. Idiopathic Sjögren's syndrome is predominantly a disease of women; HIV-associated Sjögren's syndrome affects primarily men. Autoantibodies are an infrequent finding in HIV-associated Sjögren's syndrome, compared to the idiopathic variety. Because treatment for the two conditions differs, HIV should be considered in all men with clinical Sjögren's syndrome and a low antibody profile.

LUPUS SYNDROMES

It is difficult to distinguish SLE from HIV-associated lupus-like syndromes. The HIV-infected individual commonly presents with a history of fever, malaise, modest weight loss, and an erythematous, scaly facial rash. Examination is likely to reveal arthralgias, lymphadenopathy, thrombocytopenia, modest proteinuria, polyclonal hypergammaglobulinemia, and a low positive ANA. The same constellation of findings is characteristic of SLE. Because of the similarities in laboratory and clinical findings, suspicion of HIV depends on the natural history and target organ disease, as well as recognition of the patient in a high-risk population. As noted, HIV detection testing is warranted if the etiology is doubtful.

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C *PYLORIS*: ROLE IN GASTRIC MUCOSAL DISEASE

The organism *Campylobacter pyloris* is found in an increasing percentage of patients with chronic gastritis

and it is seldom found in patients without chronic gastritis. Although 40% to 60% of patients with nonulcerative dyspepsia have chronic C *pyloris*-associated gastritis, the relationship between the organism and gastritis, as well as other gastroduodenal disease, is not clear. The most effective treatments likewise are not clearly established; eradication is difficult, and probably requires a multi-drug approach.

However, identification of the organism and eradication may be important. It is known that nearly all patients with duodenal ulcer also have C *pyloris*-associated gastritis, and that C *pyloris* is found in the duodenal bulb in duodenal ulcer patients only on foci of gastric metaplasia. C *pyloris* is not found on duodenal mucosa. It is unknown whether these relationships point toward an etiologic role of C *pyloris* in duodenal ulcer disease.

Although the 7- to 10-day acute phase of C *pyloris* gastritis produces characteristic symptoms (gnawing hunger sensation, occasional vomiting, bloating, and borborygmi), the chronic phase is frequently asymptomatic and may remain so for years. Because endoscopic findings correlate poorly with the presence of histologic gastritis, antral biopsies must be performed for the diagnosis of C *pyloris*-associated gastritis. Furthermore, histologic identification of the organism requires special staining techniques. Testing for urease activity in biopsy specimens, however, is very helpful in making a rapid preliminary diagnosis.

Treatment of patients with dyspepsia and C *pyloris*-associated gastritis is best attempted in the context of a research protocol. Single-agent therapy with drugs possessing in vitro activity against C *pyloris* has not been effective. A regimen of bismuth subsalicylate (30 mL or 2 tablets qid for 3 weeks) and amoxicillin (500 mg tid during the last 2 weeks) is associated with an eradication rate of 50% to 70%. Regimens that use two antibiotics along with the bismuth preparation reportedly have eradication rates of up to 90%.

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MANAGEMENT OF DEPRESSION: BOTH DRUGS AND PSYCHOTHERAPY ARE NEEDED

A combination of pharmacologic intervention and psychotherapy is needed for adequate management of bipolar affective disorders, which are relatively common. Newer therapeutic agents may be useful in the management of the patient with lithium-resistant disease.

The incidence of manic depression is high and the mortality and morbidity are significant. The incidence of manic depression is comparable to diabetes mellitus: 20% of the worldwide population is now being treated, in some form, for depression.

Manic depression has three phases: mania, depression, and a mixed phase. The mixed phase, characterized by high and low episodes within a 24- to 48-hour period, is difficult to diagnose and tends to resist treatment. Approximately half of these patients deny the existence of manic-depressive symptoms because, to themselves, they seem normal. Consequently, taking a history is a labor-intensive chore that must involve the family.

Because manic depression is a biological and psychological disorder, pharmacologic intervention must be complemented by psychotherapy. If a patient has had a mood disorder since adolescence, his self-esteem and confidence are "atrophied," and require rehabilitation in addition to drug therapy. The phenomenon can be compared to the need for cardiac rehabilitation in a heart surgery patient in whom rehabilitation is employed in conjunction with drug therapy. The patient whose mood disorder did not begin until adulthood is more likely to respond to drug therapy alone.

DRUG THERAPY

Lithium

Lithium carbonate is the gold standard for treatment of manic depression. It has potent anti-manic properties in both acute and prophylactic settings. Lithium has some antidepressant effect as well. The upper limits of the therapeutic range are 1.0 to 1.2 mEq/L; serum measurements will identify noncompliance, the most likely reason for poor response or relapse.

Most of the 20% to 30% of patients who are truly resistant to lithium therapy have rapid-cycling manic depression. Rapid cycling is a variant of bipolar mood disorder, characterized by at least four major mood swings annually. The mood swing may last for several weeks, and initially the highs and lows are relatively mild. They