nocompromised adults and children, and occasionally in healthy children [2, 3]. Purpuura fulminans has been attributed to disseminated intravascular coagulation (DIC) [2]. Several mechanisms have been implicated to explain this phenomenon in the absence of endotoxin, including complement activation by capsular polysaccharide antigens or circulating immune complexes [4]. Clearance of such substances by the spleen may prevent the development of fulminant sepsis, DIC, and ARDS in healthy individuals and may explain such overwhelming presentation of infection in splenectomized individuals.

The description of this S. pneumoniae–related syndrome in healthy children and our report describing the development of pneumococcal sepsis and purpuura fulminans in a healthy adult raise concerns about the possibility of additional mechanisms for the development of DIC, ARDS, and multiorgan failure in patients with pneumococcal sepsis. The prevalence of severe complications of pneumococcal sepsis in community settings is not known; whether these complications are an emerging pneumococcal syndrome and what effects the increasingly reported pneumococcal resistance to penicillin may have on therapy merit further study. Although it is not known whether vaccination may help reduce the likelihood of severe complications of pneumococcal sepsis and/or pneumococcal resistance to penicillin, it seems prudent to recommend this course to maximize the use of available vaccine.

**Dermonodular and Visceral Leishmaniasis Due to Leishmania infantum with a New Isoenzyme Pattern: Report of a Case Involving a Patient with AIDS**

Of ~500 cases of coinfection with HIV and Leishmania that have been documented worldwide up to 1994, >90% were recorded in Spain, Italy, and France [1], where Leishmania infantum is recognized as the only etiologic agent [2]. Herein we report a leishmania infection in a patient with AIDS, which was associated with atypical clinical findings and was caused by an L. infantum strain with a new isoenzyme pattern.

A 36-year-old Italian man who was an iv drug user and had been seropositive for antibodies to HIV since 1986 was first hospitalized in January 1992 for left hemiparesis. MRI revealed lesions suggesting neurotoxoplasmosis, which gradually cleared after treatment with pyrimethamine/sulfadoxine. In September 1992 the patient was readmitted because of persistent fever and diffuse arthromyalgias. Clinical, radiographic, and microbiological investigations were negative. He was discharged, and corticosteroid and antipyretic therapy partially controlled the fever for some months afterward.

In April 1993 he complained again of persistent fever and arthromyalgias in addition to progressive weight loss. A physical examination during subsequent hospitalization showed small, subcutaneous, nonulcerated nodules (3–4 mm in diameter) at the metacarpo- and/or pneumococcal resistance to penicillin, it seems prudent to recommend this course to maximize the use of available vaccine.

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**References**


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Figure 1. Nonulcerated nodular lesions are seen at the metacarpophalangeal articulations in a 36-year-old man with AIDS and leishmaniasis.

The patient described herein had atypical clinicoinmunologic features and a poor response to drugs, as has been repeatedly described in HIV-associated cases of leishmaniasis [5]. Two previous cases of nonulcerated dermonodular neoformations associated with visceral dissemination of leishmania infection in HIV-infected patients were reported in the literature [6, 7]. In both cases the species and zymodeme of the parasite were undetermined. The finding of new Leishmania zymodemes in HIV-infected individuals is not uncommon [8]. This has been interpreted as a result of the high susceptibility of immunocompromised hosts to harboring strains that probably have low virulence or are avirulent for immunocompetent subjects [9]. Whether zymodeme MON 190, isolated from our patient, represents a dermotropic (as it would appear from some of its isoenzyme characteristics), viscerotropic, or avirulent Leishmania species cannot be determined on the basis of this single case. Our patient probably acquired the infection during his brief trip to Spain, because the zymodeme MON 190 shows a G6PD electromorph that is characteristic of Spanish (rather than Italian) L. infantum zymodemes. Two different therapeutic regimens led to the disappearance of dermal nodules but not to parasitological cure.

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References