Acute Cervical Lymphadenopathy

To the Editor: Acute cervical lymphadenopathy has not been reported as a symptom of Mycobacterium genavense infection. In June 1994, a 32-year-old injecting drug user, who had been monitored since 1987 for human immunodeficiency virus (HIV) infection at the outpatient clinic of the Infectious Disease Institute, Perugia, Italy, was admitted to a hospital with fever (39°C) and progressive swelling over the submandibular region and neck. In addition to being febrile, upon physical examination the patient had tender left submandibular and cervical lymphadenopathy approximately 3 cm in diameter, with redness and edema of the overlying skin. The CD4+ lymphocyte count was 0.01 x 10^9/L. A specimen obtained by needle aspiration of the submandibular lymph node contained numerous acid-fast bacilli, and the patient was treated with isoniazid, rifampin, ethambutol, and amikacin for presumed Mycobacterium tuberculosis with a good response; however, 10 days later, the patient's submandibular pain recurred along with abdominal pain and bowel irregularities. Gastroscopy showed superficial duodenal erosions, and acid-fast bacilli were visualized by microscopy. Shortly thereafter, pain and swelling of the patient's right ankle developed, and small lesions were noted on the dorsum of the right foot. Clarithromycin was substituted for the amikacin for suspected without a clear response, and a course of steroids was initiated with clinical improvement. Symptoms recurred when the steroids were tapered. Ciprofloxacin was substituted for isoniazid, and amikacin was readministered. Material from a repeat needle aspiration of the submandibular node 1 month later also showed acid-fast bacilli by microscopy.

Cultures of the initial submandibular aspirate demonstrated poor growth in Bactec 13A broth and did not grow on solid media. The specimen was sent to a reference laboratory where acid-fast bacilli were successfully isolated 10 weeks later in Middlebrook agar containing mycobactin J. These acid-fast bacilli were subsequently identified as M. genavense by high-pressure liquid chromatography and nucleic acid sequencing of the 16S rRNA. By this point, the patient had improved on a regimen of isoniazid, rifampin, ethambutol, and amikacin for presumed M. genavense infection, and this regimen was continued 16 months after the initial episode.

M. genavense is a novel mycobacterial species that causes serious disseminated infections with massive involvement of the small intestine, spleen, liver, and abdominal lymph nodes in profoundly immunocompromised persons. Cultures with Bactec 13A vials containing radiometric liquid medium are generally positive but subcultures on solid media are unsuccessful (1). Lowering the pH of medium to six enhances its growth (1), while adding mycobactin J to Middlebrook 7H11 (2) solid media can help in the isolation. The suppression of growth of M. genavense by NAP can cause confusion with the M. tuberculosis complex; however, M. genavense can be easily distinguished by its slow growth and its dysgonic nature. At present, the way to identify M. genavense is by 16S rRNA sequencing (3). High-pressure liquid chromatography can be used (4).

Maria Bruna Pasticci, M.D.,* F. Baldelli,* F. Bistoni,* C. Piersimoni,† G. Sbaraglia,† G. Stagni,† and S. Pauluzzi†

*Infectious Disease Institute, Perugia University, Policlinico Monteluco, Perugia, Italy; †Department of Experimental Medicine and Biochemical Sciences, Microbiology Section, Perugia University, Perugia, Italy; and ‡Department of Clinical Microbiology, "Umberto I - Torrette" Hospital, Ancona, Italy

References