Pulmonary tuberculosis due to mycobacterium microti in an human immunodeficiency virus-infected patient
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Recen ly, we described the microbiological iden ifica ion of M. cobacterium microti (which belongs o he M. cobacterium tuberculosis complex), by using novel gene ic markers, in speci mens from four immunocompromised pa ien s [1]. Herein we de tail he clinical course of one of he four pa ien s who was HIV-1-infec ed.

A 39-year-old, homoseual, HIV-1-infec ed man was admi ed o he hospit al because of weigh loss, fever, and a flu-like syndrome. Six weeks before admission, he had developed nigh swea s wi h concurren weigh loss and in ermi en fever ( empera ure, ≤40°C) wi h chills. A ha ime his CD4+ lymphocy e coun was 20/mm³ and his viral load was 140,000 copies/mL, despi e an ine rivial riple herapy. He had a nonproduc ive cough and dyspnea on exer ion, and he had hea ed a urry ing. His bowel movemen s were unremarkable. Physical examina ion a ha ime of admission revealed a weigh of 78.5 kg (normal, 90 kg). There were no ches abnormali es no ed. A sharp edge of he liver was palpable 3 cm below he right cos al margin. Unchanged symme ric allye and inguinal lymphadenopa hy was found.

Skin es ing (Mul i es CMI, Ins i u Méru e, Beneluse, Brus-sels, Belgium) including uberculin skin es ing indica ed comple e energy. A ches radiograph revealed a small inful ra e in he lef lower lung lobe, and abdominal ul rasonography showed hea o-splenomegaly. Zeelh-Nielsen s aining of spu um and s ool speci mens revealed sharply curved acid-fas bacilli (AFB). Cul ures of spu um, blood, and s ool specimens remained nega ive for mycobac eria. A PCR assay performed on he spu um wi h primers speci fic for he IS6110 sequence of M. cobacterium tuberculosis complex [2] was posi ve. Fur her analysis by use of spoligo yping, a technique based on he mycobac erial s rain-denden presence or absence of shor nonrepe i ve ier speacer sequences ha in erspe re he repie i e direc reape (DR) sequences, iden ified he species as M. microti [3].

Therapy wi h emba ol, pyrazinamide, isoniazid, and rifabu in was ins i u ed. A follow-up af er 20 weeks, he clinical signs and symp oms of he mycobac erial infec ion had disappeared, bu spu um examina ion s ill indica ed high numbers of curved AFB. A CT scan of he ches showed a persis en dense infil ra e and small cavi es in he lower la eral region of he lef lung (figure 1). Conse quen ly, clari hromycin and ofloxacin were added o he quadruple an imycobac erial eraymen s. During he nex 2 mon hs when no AFB were observed in he spu um, herapy was changed o ha wi h he ini al quadruple regimen. However, 2 mon hs la er (9 mon hs af er diagnosi s), AFB were again no ed in he spu um. The six-drug herapy regimen was resumed. He had a nonproduc ive cough and dyspnea on exer ion, and he had hea ed a urry ing. His bowel movemen s were unremarkable. Physical examina ion a ha ime of admission revealed a weigh of 78.5 kg (normal, 90 kg). There were no ches abnormali es no ed. A sharp edge of he liver was palpable 3 cm below he right cos al margin. Unchanged symme ric allye and inguinal lymphadenopa hy was found.

Skin es ing (Mul i es CMI, Ins i u Méru e, Beneluse, Brus-sels, Belgium) including uberculin skin es ing indica ed comple e

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The pathogenicity of M. microti was first discovered and described in mice by Wells [4]. The organism was later distinguished from M. tuberculosis [5]. M. microti has a characteristic morphology (generally pleomorphic: forming a sickle, a spiral, or an S-like appearance). This typical curved appearance, seen on Ziehl-Neelsen staining, is generally absent during in vivo culture. This bacillus is difficult to distinguish from the other members of the M. tuberculosis complex on the basis of biochemical properies. However, nowadays, the diagnosis can be made by using newly developed spoligotyping methods [3, 6]. To date, there are no specific reagents recommended for infection due to M. microti, given that additional data is required for the diagnosis of tuberculosis. In humans, M. microti warrants the use of standard precautions for preventing transmission of the disease. To our knowledge, only a few reports have implicated M. microti in human infections [1–4].

Bacteremia Due to Camplobacter sputorum Biovar sputorum

Camplobacter sputorum biovar sputorum can be found in the oral cavity and in the gastrointestinal tract of humans, but rarely causes disease. To our knowledge, only a few reports have implicated this organism in human infections [1–4].

In the presence of these reports, the isolation was recovered from abscesses [1–3], whereas in the fourth report [4], the organism was recovered from fecal samples of a patient with diarrhea. We describe a case of Camplobacter sputorum biovar sputorum in a patient with a knee abscess and a recurrent chancroidal infection.

A 56-year-old woman with non-insulin-dependent diabetes mellitus came to hospital because of a 1-day history of nausea, vomiting, and chills. Four weeks earlier, she had fallen at home, grazing her right knee on the carpet. The right-knee lesion had developed surrounding erythema and had begun discharging malodorous fluid. A admission to the hospital, the patient had a temperature of 38.4°C. A 1-cm × 8-cm abscess cavity was noted with purulent discharge and surrounding cellulitis. There was no evidence of any deep abscesses, and there was no history of recent personal procedures.

Laboratory evaluation revealed a WBC count of 23.4 × 10^9/L (80% neutrophils) and an elevated C-reactive protein level of 384 mg/L. The surface of the abscess cavity was swabbed and blood was drawn for culture before commencing therapy with iv. ics.

References


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Figure 1. CT scan of the chest of a 39-year-old, HIV-1-infected woman with pulmonary tuberculosis due to Mycobacterium microti after 5 months of quadruple antituberculosis therapy. A cavity infilling the lower lung base.