Author’s response to reviews

Title: Mycobacterium arosiense, an unexpected cause of osteomyelitis in a patient with sarcoidosis: a case report

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BMC Infectious Diseases

Dear Editors and assistant Editor Oliver Cocks,

Please find enclosed a manuscript entitled “Mycobacterium arosiense, an unexpected cause of osteomyelitis in a patient with sarcoidosis: a case report”

We present a case of vertebral osteomyelitis caused by a rare nontuberculous mycobacteria Mycobacterium arosiense, which is one of the novel members of the Mycobacterium avium complex. An adult male with known sarcoidosis and a previous discus prolapse presented with uncharacteristic symptoms. A Magnetic resonance imaging-scan of columna revealed a tumor suspect process at the thoracic/lumbar vertebrae. Biopsy smears revealed acid-fast bacilli and mycobacterial culture, a not readily identifiable nontuberculous mycobacteria. Routine commercial line probe assays were unable to identify the organism and failed or misidentified the bacteria as a Mycobacterium intracellulare. The diagnosis of Mycobacterium arosiense therefore requires supplemental sequencing of the 16S rRNA gene. The case fulfilled the American Thoracic Society guidelines criteria of clinical significance. Antituberculous treatment was initiated and changed to Mycobacterium avium complex treatment once the organism was identified. Symptoms including those from sarcoidosis waned on treatment. Although the cause of sarcoidosis is still unknown bacterial causes have been implicated as triggers. Apart from corticosteroid treatment no actual immune defect was identified and it was inconclusive whether the patient ever suffered from sarcoidosis. Mycobacterium arosiense, a rare pathogen may readily be misidentified and therefore be underreported.

To our knowledge this is the second case of osteomyelitis caused by Mycobacterium arosiense ever to be reported.

We have now included a consent form from the patient and the text about consent as suggested in a new version without track changes and highlighting.

We look forward to hearing from you. On behalf of all co-authors,

Didi Bang, Erik Michael Rasmussen, and Aase Bengaard Andersen
Yours sincerely,
Didi Bang, MD, PhD, Staff Specialist in Clinical Microbiology

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