

Letter to the Editor

Chest Wall and Spinal Tuberculous Abscess

Dear Editor,

I read with special interest the Photoclinic prepared by Yousefi, *et al.*, very recently published in this journal. The authors of the well documented paper highlighted some diagnostic challenges involving a 29-year-old man with tuberculous abscesses in the chest wall and spine.¹ Fever, poor appetite, and excessive loss of weight surely raised the hypothesis of tuberculosis and/or malignancy. Moreover, urinary retention and lower-extremity weakness might herald some neurological complications of this infectious disease, highly prevalent in developing regions. Anemia and high erythrocyte sedimentation rate in the commented case were indicative of an active inflammatory process²; moreover, findings of the imaging studies were compatible with a mycobacterial infection. In fact, MRI is the gold standard tool to confirm the diagnostic hypothesis of osteomyelitis and of paraspinal abscesses, either of tuberculous or other etiologies. Interestingly, the initial microbiological investigations resulted negative for *M. tuberculosis*, and definitive diagnosis was achieved by reverse-transcriptase polymerase chain reaction performed on specimens from the chest wall biopsy as well as the paraspinal abscess materials.¹

I consider very useful this single but clearly informative exercise of diagnosis by images, in particular because pulmonary and extrapulmonary tuberculosis still pose a conspicuous social and economic burden on public health systems of low-income, non-industrialized areas.^{2,3} The paper was well discussed, but some additional comments would be pertinent in the setting of tuberculosis, which is the major infectious cause of death in the whole world, with its prevalence varying between 1.8% and 9.2%, mainly in developing regions, and a mortality rate up to 50% if untreated.^{2,3} Immunosuppression, delayed diagnosis and late onset of treatment play important roles in the outcome.^{2,3} A possible concern is about indiscriminate use of fluoroquinolones, which are effective drugs against *M. tuberculosis*, to control other pulmonary, gastrointestinal, or genitourinary infections.³ In individuals with unsuspected tuberculosis, this can hinder the isolation of Koch's bacillus in the culture media, propitiating the occurrence of delayed diagnosis of this ominous infection.^{2,3}

In the report herein commented, polymerase chain reaction was utilized. Interferon-gamma release assays can detect latent tuberculosis in up to 85% of cases, but it is also a sophisticated diagnostic resource, not available in the vast majority of low-income regions.³ A major concern should be about the prevalence of tu-

berculosis among inhabitants of these areas, presenting chronic obstructive pulmonary disease and utilizing corticosteroids and quinolones.³

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References

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Author's Reply

Dear Editor;

My co-authors and I co appreciate your attention and extended precision. We agree with your comment; MRI is the appropriate imaging for diagnosis of paraspinal abscess and osteomyelitis. Also, we agree that delayed diagnosis may lead to complications. In this area, quantiferon in latent tuberculosis is useful, but is not available; however, PCR is available and useful in active tuberculosis.

Unfortunately, consumption and overuse of fluoroquinolones for respiratory, urinary and gastrointestinal infections is a major health problem that leads to difficulty in timely diagnosis .

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