

Review of: "[Case Report] Challenging Detection of Latent Tuberculosis in a Patient Undergoing High-Dose Corticosteroid Therapy for Acute Hemolytic Anemia and Rhupus Arthropathy"

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Potential competing interests: No potential competing interests to declare.

The authors reported a case of lung tuberculosis (TB) which developed in a acute hemolytic anemia patient receiving long term immunosuppressive therapy for rheumatoid arthritis/systemic lupus erythematosus (RA/SLE) overlap syndrome. They stated that this is a rare case in the United States where a prevalence of TB is very low. They emphasized that it should be careful to estimate the detection tools for TB (i.e. TST or IGRA) in patients with immunosuppressive therapy including high-dose corticosteroids, because results might be false-negative.

The authors stated that this is the first case of reactivation of TB complicated by RA/SLE overlap syndrome. However, this is true for any other diseases which require long-term immunosuppressive therapy. Indeed, this patient has been treated with prednisone 5mg every other day and methotrexate 200mg/w which might be sufficient to induce TB reactivation from LTBI status. The development of TB from LTBI or unknown TB status may not be rare in the countries, such as Japan, with higher prevalence of TB than the US. Therefore, impact of this case report is not high.

The authors described that high dose corticosteroid therapy for AIHA likely facilitated TB activation, leading to the development of necrotizing pneumonia. I think that it is unlikely that necrotizing pneumonia developed so rapidly after short-term high dose corticosteroid therapy. Instead, TB lesion might exist before high dose corticosteroid therapy. How about chest X-ray on admission (i.e. before high dose corticosteroid therapy)? Is there any sign of pneumonia on admission? In addition, when chest X-ray and CT scan were performed? What is the interval between admission date and chest X-ray examination ? If TB lesion had already been present in the chest X-ray or CT on admission, the authors must change the title of this case report.

In this regard, development of TB from LTBI status may be associated with predonisone use of more than 15mg/day for longer than 1 month (American Thoracic Society MMWR Recommendation Report 2000). What was the initiation dose of corticosteroid at the previous episode of autoimmune hemolytic anemia? How long has this patient received corticosteroid therapy before admission?