

Commentary

A paradoxical response is defined as the clinical or radiological worsening of pre-existing tuberculous lesions or the development of new lesions not attributable to the normal course of disease, in a patient who initially improved with antituberculosis therapy. Up to 10% patients with central nervous system tuberculosis report paradoxical response.^[1,2] Among HIV-negative patients, symptomatic neurological deterioration may occur with the enlargement or appearance of intracranial tuberculomas during paradoxical response.^[3]

Hence, there is an emerging need to recognize the deterioration resulting from paradoxical response rather than from treatment failure, drug resistance, or other infections. In this line, the article "Cerebral tuberculoma as a manifestation of paradoxical reaction in patients with pulmonary and extra-pulmonary tuberculosis: Case reports and review of literature"^[4] represents an outlook towards this goal. This article focuses on a crucial challenge in tuberculosis management particularly in resource-limited settings, describing clinical features associated with cerebral tuberculomas as evidence of paradoxical reaction in five cases of HIV-negative patients with pulmonary and extra-pulmonary tuberculosis.

Given that these adverse events may result in the discontinuation of one or more antitubercular drugs, thereby limiting future therapeutic options and/or reducing adherence,^[5] the differential diagnosis of paradoxical response as a cause of transient clinico-radiological deterioration in patients with tuberculosis becomes key for clinicians to recommend the best possible management.

Luciana Balboa

*Instituto de Medicina Experimental (IMEX)-CONICET,
Academia Nacional de Medicina,
Buenos Aires, Argentina*

Address for correspondence:

Dr. Luciana Balboa,
Instituto de Medicina Experimental (IMEX)-CONICET,
Academia Nacional de Medicina,
Pacheco de Melo 3081,
1425, Buenos Aires, Argentina.
E-mail: luciana_balboa@hotmail.com

References

1. Breen RA, Smith CJ, Bettinson H, Dart S, Bannister B, Johnson MA, *et al.* Paradoxical reactions during tuberculosis treatment in patients with and without HIV co-infection. *Thorax* 2004;59:704-7.
2. Gupta M Bajaj BK, Khwaja G. Paradoxical response in patients with CNS tuberculosis. *J Assoc Physicians India* 2003;51:257-60.
3. Cheng VC, Ho PL, Lee RA, Chan KS, Chan KK, Woo PC, *et al.* Clinical spectrum of paradoxical deterioration during antituberculosis therapy in non-HIV-infected patients. *Eur J Clin Microbiol Infect Dis* 2002;21:803-9.
4. Das A, *et al.* Cerebral tuberculoma as a manifestation of paradoxical reaction in patients with pulmonary and extra – pulmonary tuberculosis: Case reports and review of literature. *J Neurosc Rural Pract* 2012;3:350-4.
5. Melleron H, Meintjes G, Burman WJ, Maartens G. Complications of antiretroviral therapy in patients with tuberculosis: Drug interactions, toxicity, and immune reconstitution inflammatory syndrome. *J Infect Dis* 2007;196 Suppl 1:S63-75.

Access this article online

Quick Response Code:



Website:
www.ruralneuropractice.com