



Brucellosis should be Kept in Mind in Chronic Meningitis

Kronik Menenjit Etiyolojisinde Brusellozda Akılda Bulundurulmalıdır

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Dear editor,

We read the article, “Two cases with a diagnosis of tuberculosis meningitis,” published in your journal with interest (1). According to World Health Organization data, 10 million people are infected with tuberculosis yearly, and 1.5 million die (2). Although the incidence of tuberculosis in Türkiye has decreased compared to previous years, we are still one of the 18 priority countries contributing 85% of the world’s tuberculosis burden (2). Although central nervous system tuberculosis is rarely seen among patients with tuberculosis, it is still significant because of its mortality and morbidity. In the article, the authors draw attention to tuberculosis, a critical infectious disease in our country, the diagnostic difficulties of tuberculous meningitis (TM), and introduce the Lancet consensus diagnostic criteria. We want to draw attention to two issues related to chronic meningitis that are specific to the cases shared in this article.

First, the authors state that quadruple antituberculosis treatment was started in both cases, but corticosteroid treatment was not mentioned. Although the use of steroids in treating infectious meningitis has to date only been discussed, this approach is recommended because it provides resolution of basal exudate and, if present, tuberculomas in TM (3). The authors did not specify the clinical staging of the cases; however, based on the clinical findings described, we evaluated the cases as stage II. In TM, particularly in stages II and III, 60-80 mg/day of prednisone treatment is recommended (3,4).

The second issue is that both patients should have been examined for brucella infection. Especially, brucellosis should have been investigated in the disease etiology because the first case’s anamnesis included a history of animal husbandry. Neurobrucellosis is important in the etiology of chronic meningitis, which is defined as a slowly progressing and fluctuating disorder (4). Since brucellosis is common in our country, we suggest that brucella agglutination should have been determined from the patients’ blood and cerebrospinal fluid samples. In the second case, the diagnosis of TM was confirmed because *Mycobacterium tuberculosis* was isolated. However, neurobrucellosis could not be ruled out in the first case.

Neurobrucellosis is one of the most important clinical manifestations of brucellosis, and the reduction of morbidity in patients is possible with early diagnosis and appropriate treatment (5). It should be considered in the etiology of chronic meningitis, especially in endemic areas.

Ethics

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References

1. Kösehasanoğulları G, Yüce A, İdilman F. Two patients with tuberculous meningitis. *Turk J Neurol* 2012;18:26-29.
2. https://www.who.int/health-topics/tuberculosis#tab=tab_1 (28 December 2020).
3. Fitzgerald DW, Sterling TR, Haas DW. *Mycobacterium tuberculosis*. In: Mandell GL, Bennett JE, Dolin R (eds). *Principles and Practise of Infectious Diseases*. 7. ed. Philadelphia: Churchill Livingstone, 2010: 3129-3163.
4. Baldwin KJ, Zunt JR. Evaluation and treatment of chronic meningitis. *Neurohospitalist*. 2014;4:185-195.
5. Akçam FZ, Akçam M, Yılmaz M, et al. Neurobrucellosis: two cases, two different presentation. *Turk J Neurol* 2020;26:342-345.