Keywords: Hb M-Iwate, Cyanosis, Methemoglobinemia

Anahtar Sözcükler: Hb M-Iwate, Siyanoz, Methemoglobinemi

Conflict of Interest: The authors of this paper have no conflicts of interest, including specific financial interests, relationships, and/or affiliations relevant to the subject matter or materials included.

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Hodgkin Lymphoma, Tuberculosis, and Atypical Radiologic Image

Hodgkin Lenfoma, Tüberküloz ve Atipik Radyolojik Görüntü

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To the Editor,

We read the report by Büyükşimşek et al., [1] "Atypical Radiologic Image Characterized by Cavitary Lung Lesions in a Case of Hodgkin Lymphoma" (HL), with great interest. Büyükşimşek et al. [1] reported on a case of HL presenting with abnormal lung radiologic imaging and mentioned that "Disseminated cavitary lesions mimicking tuberculosis or other opportunistic infections in a case of HL is interesting and differential diagnosis is very important". We would like to share our ideas regarding this observation. Indeed, lung involvement due to lymphoma is possible. Nevertheless, the concurrence between HL and tuberculosis is detectable. In endemic areas of tuberculosis, such as Southeast Asia, tuberculosis screening is routinely done for any cancerous patients, including those with HL. Pathophysiologically, a common pathway that can result in increased risk for tuberculosis among patients with HL is the alteration of the antioxidative system. The depletion of glutathione (GSH) due to HL [2] can increase the risk for tuberculosis since GSH plays an important role in defending against mycobacterial pathogens [3]. Considering the present report by Büyükşimşek et al., [1] there is an interesting question of whether the present case of HL had a concurrent tuberculosis infection or not. Büyükşimşek et al. [1] used the QuantiFERON test for exclusion of tuberculosis. In a recent report, the sensitivity and specificity of the QuantiFERON test were found to be poor [4]. In cases with underlying vitamin B12 deficiency, false negative results by QuantiFERON are possible [5]. In a recent report, vitamin B12 deficiency was observable in 0.54% of patients with HL and anemia [6].

Keywords: Hodgkin Lymphoma, Tuberculosis, Radiology

Anahtar Sözcükler: Hodgkin Lenfoma, Tüberküloz, Radyoloji

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Reply from the Authors

To the Editor,

We thank Drs. Yasri and Wiwanitkit for their interest and for sharing their thoughts on our case report. We agree with them about the co-occurrence of tuberculosis and lymphoma, especially in endemic areas. Additionally, it is very well known that infections with *Mycobacterium tuberculosis* and other intracellular microorganisms are common in cases of Hodgkin lymphoma (HL) due to underlying T-cell defects [1,2]. On the other hand, clinical symptoms and signs including fever, night sweats, and weight loss are very common in tuberculosis and in HL, and sometimes it may be very difficult to differentiate HL and/or accompanying tuberculosis in a case of HL. For this reason, as we discussed before, tuberculosis was the first diagnosis in our case when the patient presented with fever and night sweats. To differentiate and to exclude tuberculosis, we tried different technologies, including culture for tuberculosis and follow-up radiologic imaging, and also clinical signs and symptoms. Of course QuantiFERON was not the only applied test in our case, but due to the journal's space limitations we could not mention the other tests: culture for tuberculosis was reported as negative and the patient responded very well to anti-lymphoma therapy only.

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