



Clinical Picture in Hematology

Hematoloji'de Klinik Tanımlama Üzerine

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To the Editor,

I am writing this letter concerning the “Clinical Picture in Hematology” entitled “Isolated Zinc Deficiency Causing Severe Microcytosis and Sideroblastic Anemia” by Shweta et al. in a recent issue of this journal [1].

Although we have seen several cases of zinc and iron deficiency with geophagia, hepatosplenomegaly, growth retardation, and hypogonadism (Tayanç-Reimann-Prasad syndrome) [2] and zinc deficiency with acrodermatitis enteropathica and immunodeficiency, the authors' case looked completely different than these other syndromes, with high ferritin and bone marrow ring sideroblasts (low zinc level was most likely an associated finding).

Although the authors' working diagnosis of “myelodysplastic syndrome (MDS, refractory anemia with ring sideroblasts)” seems to be the best choice, I would like to question probable pyridoxine administration in mineral supplements that contained copper and zinc “amongst” others.

Among other possibilities, hepcidin, heme oxygenase heterozygosity [3], chronic liver disorders [4], and the presence of α -thalassemia (hereditary or acquired because of the proband's origin of birth and erythrocyte morphology) should be investigated by hemoglobin electrophoresis at pH 6.4, and H inclusion bodies should be determined for a better

explanation in this very unusual case, which might shed light on iron and zinc metabolism, sideroblastic anemia, and iron homeostasis at large, I believe.

Conflict of Interest Statement

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

Key Words: Microcytosis, Zinc deficiency

Anahtar Sözcükler: Mikrositosis, Çinko noksanlığı

References

1. Shweta G, Prantesh J, Shashvat S. Isolated zinc deficiency causing severe microcytosis and sideroblastic anemia. Turk J Hematol 2014;31:339-341.
2. Say B, Özsoylu S, Berkel I. Geophagia associated with iron deficiency anemia, hepatosplenomegaly, hypogonadism and dwarfism. Clin Pediatr (Phila) 1969;8:661-668.
3. Poss KD, Tonegawa S. Heme oxygenase 1 is required for mammalian iron reutilization. Proc Natl Acad Sci USA 1997;94:10919-10924.
4. Göksu N, Özsoylu S. Hepatic and serum levels of zinc, copper and magnesium in childhood cirrhosis. J Ped Gastroenterol Nutr 1986;5:459-462.

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