Letter to the Editor

I read the recent paper on “Insulin-like growth factor-1 in children with Beta thalassemia minor” by Karamifar et al (Turk J Hematol. 2008; 25(3): 136-139) with great interest. They stated that IGF-1 levels are decreased in Iranian beta thalassemia minor children. They concluded that some etiologies other than those described to date for growth retardation in beta thalassemia major may exist [1].

However they missed an important factor which was previously reported: that is zinc deficiency. Growth retardation is a common problem in beta thalassemia patients. There are many contributing factors including chronic zinc deficiency. Further zinc supplementation effected linear growth positively [2]. Our group previously reported that zinc deficiency may affect the generation of somatomedin-C which in turn named as Insulin growth factor-1 (IGF-1) Decreased IGF-1 levels were reported by us and others in beta thalassemia major patients [3]. IGF-1 mediates growth by contributing to the effect of growth hormone and requires Zn to be synthesized in liver [4].

Moreover; marginal zinc deficiency with nutritional background, may have effect on the decreased synthesis of IGF-1. Nutritional Zn deficiency is a common problem in Iranian population as previously reported [5]. Karamifar et al.’s data should be analyzed accordingly.

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References