Letter to the Editor — Comments

“Frequency of hypothyroidism in Patients with β-thalassemia”

Madam, being a part of Thalassemia research ourselves, we read with great interest an original article entitled "Frequency of hypothyroidism in Patients with β-thalassemia" in the recent edition of your respected journal.1 We congratulate the authors in this regard. However, there are certain queries which if clarified can help us better comprehend the results of that study.

One of the crucial finding in that study was the significant association of Hypothyroidism with elevated Ferritin levels. However, the methodology reveals that Ferritin levels were not assessed during the study period and the "Most recent" available Ferritin levels were ascertained (without signifying any duration of the term "recent"). This shows that the actual Ferritin levels were not entirely reflective of the ages mentioned in the study. This is important because due to small sample size (70) a fluctuation of a few percentages in the levels would result in the association becoming non-significant, as the p value was 0.04 (level of significance was set as 0.05). Levels of TSH have been directly linked to Ferritin in certain studies, while others show no such relationship.3,4

A relatively large cohort study in which 200 Thalassemia patients were enrolled did not find any significant relationship between the Ferritin levels and Thyroid functional status.3 Same conclusion was drawn from a longitudinal study conducted in Italy.4

Another noteworthy finding was that all the patients were receiving sub-optimal therapy for iron chelation. However, the results did not quantify or justify this statement. In fact, no result signifying the adherence to chelation therapy was revealed in the manuscript. Even tight controls of Ferritin levels through appropriate chelation does not completely prevent the endocrine (including thyroid) complications.5

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References