Prevalence of Iron Deficiency in Thalassemia Minor

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Sir,

We read with interest the study reported by Dolai et al. [1] describing the prevalence of iron deficiency in thalassemia minor. We have previously reported the results obtained on investigation of 463 heterozygous beta thalassemics with respect to their iron status [2]. Eighty-eight (19 %) of these were children and the rest (81 %) were adults [3]. A transferrin saturation of <16 % and/or serum ferritin of <16 µg/l were used to diagnose iron deficiency (ID) [4]. Based on these criteria, 126(27.2 %) traits were found to be iron deficient. One hundred and fourteen (90.5 %) of iron deficient traits were anemic, in contrast to 241/337 (71.5 %) traits without ID, the difference being statistically ($p < 0.002$) significant. Mean Hb concentration, MCV and MCH were significantly ($p < 0.001$) lower in traits with iron deficiency as compared to traits without iron deficiency [2]. Though the present study has not reported on HbA₂ levels in traits with and without ID, we observed that mean HbA₂ was not significantly different in traits with ID(5.11 ± 0.80 %) and without ID(5.19 ± 0.73 %) and was elevated in all traits except one even in the presence of iron deficiency [5]. Serum ferritin was estimated in 233/463 traits (ELISA) and was found to be reduced in 82(35.2 %), normal in 62.2 % patients and elevated in only 2.6 % traits [6].

The prevalence of iron deficiency was higher (27.2 %) in our study as compared to that reported in the present study (19.3 %). Beta thalassemia is the commonest

hemoglobinopathy in India. The prevalence of iron deficiency is also very high. We agree with the authors that any advantage in iron supply conferred by beta thalassemia does not protect against iron deficiency. The significantly lower Hb concentration seen in traits with ID is likely to improve with iron therapy. Hence, iron status should be assessed in all heterozygous beta thalassemics to help in decisions regarding iron therapy.

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