Cutaneous manifestations in Egyptian children with β-thalassemia major: Relation to serum ferritin, thyroid profile and treatment modalities.

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**Background**: Cutaneous manifestations may be found in many patients with hematologic disorders including thalassemia.

Patients and methods: One hundred patients with β thalassemia major attending the pediatric department of Fayoum University hospital from April 2016 to October 2016 were compared to 100 controls. Both groups underwent detailed history evaluation, clinical examination and laboratory investigations included complete blood picture, liver and kidney functions, serum ferritin and thyroid profile. Clinical dermatological

examination for all participants was done by single dermatologist.

**Results**: There was increased prevalence of xerosis (72%), pruritus (52%), idiopathic guttate hypomelanosis (22%), urticaria (16%), ephelides (freckles; 13%), and scars (13%) in the group of thalassemia compared to controls (p-value  $\leq$ 0.001). We detected a significant relation between serum ferritin and pruritus, xerosis, ephelides, idiopathic guttate hypomelanosis, urticaria and age of patients with thalassemia (p-value  $\leq$ 0.05). Xerosis, pruritus, idiopathic guttate hypomelanosis, urticaria and ephelides were higher in thalassemia patients without thyroid abnormalities (86%) than controls (p-value  $\leq$ 0.05). Although there was no significant difference between patients receiving chelating agents and patients who don't as regards skin findings (p>0.05), a significant association was found between the use of deferoxamine, defereprone and xerosis, while ephelides and urticaria were more in patients receiving deferasirox.

*Conclusion*: Since cutaneous manifestations are common among Egyptian patients with beta thalassemia major, regular dermatological follow up of these patients is recommended for early management.

**Key words:** Thalassemia, cutaneous, ferritin, thyroid profile.