

Cutaneous manifestations in Egyptian children with beta-thalassemia major: Relationship with serum ferritin, thyroid profile, and treatment modalities

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Abstract

Background: Cutaneous manifestations can be found in many patients with hematologic disorders, including thalassemia.

Methods: Patients with beta-thalassemia major attending the pediatric department of Fayoum University Hospital from April 2016 to October 2016 (n = 100) were compared with controls (n = 100). Both groups underwent detailed history evaluation, clinical examination, and laboratory investigations, including complete blood count, liver and kidney function, serum ferritin, and thyroid profile. A single dermatologist conducted a clinical dermatologic examination for all participants.

Results: Children with thalassemia had a greater prevalence of xerosis (72%), pruritus (52%), idiopathic guttate hypomelanosis (22%), urticaria (16%), ephelides (freckles;13%), and scars (13%) than controls ($P \leq .001$). We detected a significant relationship between serum ferritin and pruritus, xerosis, ephelides, idiopathic guttate hypomelanosis, urticaria, and age of patients with thalassemia ($P < .05$). Children without thyroid abnormalities were more likely to have xerosis, pruritus, idiopathic guttate hypomelanosis, urticaria, and ephelides (86%) than controls ($P < .05$). Although there was no significant difference in skin findings between patients who did and did not receive chelating agents ($P > .05$), a significant association was found between xerosis and the use of deferoxamine and deferiprone, whereas ephelides and urticaria were more common in patients receiving deferasirox.

Conclusion: Because cutaneous manifestations are common in Egyptian patients with beta thalassemia major, regular dermatologic follow-up is recommended for early management.

KEYWORDS

cutaneous, ferritin, thalassemia, thyroid profile