Articular Manifestations of Egyptian Children with Thalassemia

By
[1]Hanaa H. Eldash, , [2]Nermeen A. Foaud

Departments of [1]Pediatrics, and [2]Rheumatology & Rehabilitation
Faculty of Medicine, Fayoum University,
Fayoum, Egypt

ABSTRACT

Background: Nearly every organ system are affected in thalassemia as a result of the pathophysiology of thalassaemia and repeated blood transfusions. Rheumatological manifestations ranging from musculoskeletal complications to connective tissue diseases are frequent among thalassaemia patients.

Objective: A cross-sectional one –center study, to assess the frequency of articular manifestations in patients with thalassemia major and to evaluate its relationship with various clinical and laboratory data.

Patients and methods: the study included 100 patients with thalassemia major attending pediatric department of Fayoum university hospital from September 2017 to March 2018, their age ranged between 2-15 years. All patients were subjected to full history taking including disease duration and intervals between blood transfusions. Joint examination was done by rheumatologist; the joints were assessed clinically for the presence of joint pain and tenderness by Ritchie index, the presence of joint effusion or limitation of movement. **Results**: 63 were males and 37 were females. Disease duration was 7.5±3.8 years. Intervals between blood transfusions were 35.7±6.6 days. Joint manifestations were detected in nineteen patients (19%), with knee and ankles were the most affected joints. joint affection was significantly related to serum ferritin (P = 0.000), age (P=0.035), disease duration (P<0.006), intervals between blood transfusions (P<0.001) and splenectomy (p <0.001).Regression analysis showed that increased ferritin level, low hemoglobin and increased disease duration were significant predictors of joint affection (P=0.48, 0.006, and 0.05 respectively).

Conclusion: Knowledge of the distribution of joint affection and its features is of considerable importance in the evaluation and treatment of B-thalassemia patients. Joint affection is a common complication amongst patients with thalassemia. So, Rheumatologists are greatly encouraged to be incorporated in the management approach of beta-thalassemia.

Key words: Thalassemia, Arthropathy, splenectomy, serum ferritin.