Assessment of dental development in β-thalassemic children

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Beta-thalassemia majorly affects different tissues through chronic hypoxia, iron deposition, blood transfusion complications and complication of chelating therapy. These factors result in depression of early teeth eruption, along with overall skeletal and body growth. The aim of this study was to evaluate dental development in β-thalassemic children with different treatment modalities at different age groups. Fifty four beta-thalassemic children were included divided into 3 subgroups regarding age. Group Ia included 16 patients with age less than 4 years, group Ib included 18 patients with age 4-8 years and group Ic included 20 patients older than 8 years. Another 25 apparently healthy age and sex matched children were included as controls (group II). All patients and controls were subjected to thorough history-taking, complete medical examination included anthropometric measures plotted on growth charts, panoramic oral X-ray. The mean dental age centile of thalassemic children was less than that of control group. Negative correlations were found between dental age centile and chronological age. Significant negative correlation found between dental age centile and serum ferritin. Thalassemic children had delay in dental development compared to normal healthy children increased with age.

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The interleukin-17F (7488T/C) gene polymorphism and the risk of chronic immune thrombocytopenic purpura in Egyptian patients

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Introduction: Chronic primary immune thrombocytopenia (ITP) is an acquired autoimmune disease characterized by enhanced clearance of platelets and impaired platelet production. IL-17F is a novel inflammatory cytokine that plays an important role in some autoimmune diseases by inducing the expression of multiple chemokines and adhesion molecules. IL-17F 7488T/C polymorphism obviously influences the expression and activity of IL-17; that in turn affect the predisposition to some autoimmune diseases. We investigated the association of IL17F 7488 T/C polymorphism with chronic ITP in Egyptian patients and if it may be linked to response to treatment with glucocorticoids.

Subjects & Methods: A cohort of 107 patients with chronic ITP and 100 healthy controls were enrolled in this case control study. Genotyping of IL17F rs763780 polymorphism was determined by the polymerase chain reaction-restriction fragment length polymorphism (PCR-RFLP) technique.

Results: Chronic ITP patients had a significantly higher frequency of the IL-17F 7488TT genotype compared to controls (84.1% Vs 70.0%; Odd ratio=2.269; P value=0.015). Furthermore the IL17F 7488TT genotype was significantly associated with poor response to glucocosteroid therapy; 11.1% were steroid responsive vs. 88.9% were not responsive (P value=0.001).

Conclusion: According to our findings, the IL-17F 7488TT genotype is significantly associated with the development of chronic ITP and resistance to corticosteroid, suggesting an important role for IL-17F 7488T/C polymorphism in the pathogenesis of chronic ITP. Using therapies that blocking inflammatory cytokines pathway may be the main core of optimal treatment in such patients who are carrying the wild IL17F 7488TT genotype.

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