Dentoskeletal deformities and its relation with hemoglobin level of thalassemia children

Retno Hayati Sugiarto, author

Abstrak

The most characteristic in clinical finding of thalassemia are anemia, facies Cooley, and enlargement of the spleen and liver. Osseous alterations occur in response to marrow overstimulation due to ineffective erythropoiesis these alterations result in changes of the skeletal architecture which is most typically reflected in the maxillofacial appearance of the patients. Uncontrolled maxillary overgrowth and procumebency of the anterior teeth make facial disfigurement (Asbell,1969).

The therapy of thalassemia is focussed on treating the anemia by giving blood transfusions. It is believed that blood transfusion could prevent bone deformities (Karagiorga-Lagana 1988). Even though dentoskeletal deformity was found in many thalassemia children, not much attention has been given yet to the maxillofacial aspect. The effect but also in the alteration of mastication function. The condition of thalassemia children usually undernourish and anorexia caused by anemia. The dysfunction of mastication made the condition became worse. Therefore, it is necessary to prevent the deformity of dentoskeletal. The purpose of this study was to evaluate growth in thalassemia children.

The result of this study revealed that dentoskeletal of thalassemia children in general had smaller size than normal, but not well proportion vertically caused by lower face. The skeletal profile was more convex than normal and indicated class II skeletal due to retruded mandible. The factor of age influenced all linear skeletal and dentoskeletal component, and only one angular skeletal components (SNB). the mean level of hemoglobin pretransfusion influenced the posterior cranial base, skelet of palatal, maxilla and posterior face of thalassemia children.