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#13585 Summary

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Submission

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Title and Abstract

Title	ANALYSIS OF VITAMIN D LEVELS IN CHILDREN WITH THALASSEMIA BETA
Abstract	

Background : Beta Thalassemia is a genetic disorder inherited by autosomal recessive and has spread throughout the world, including Indonesia. Beta thalassemia requires lifelong transfusions, which can cause an accumulation of iron in the skin, liver, and kidneys, resulting in a decrease in vitamin D synthesis.

Purpose : This study aims to analyze the levels of 25-OH-Vitamin D in beta thalassemia.

Method : This study used a cross-sectional design and was conducted at Dr. Wahidin Sudirohusodo Hospital from April to July 2021. The population of this study was patients diagnosed with beta thalassemia and non-thalassemia (controls) who met inclusion criteria. This study compared vitamin D levels in beta thalassemia and non-thalassemia patients.

Results : This study involved 60 children aged 6 months to 18 years, who were divided into 2 groups: 30 children in the beta thalassemia group and 30 in the non-thalassemia group. In this study, the levels of 25-OH-Vitamin D were lower in beta thalassemia children compared to non-thalassemic children, with a p value =0.012. Children with beta-thalassemia have a 4.33 times higher risk of vitamin D deficiency compared to non-thalassemic children. With a p value =0.023, 25-OH-Vitamin D levels were significantly lower in beta HbE thalassemia children compared to beta thalassemia major children.

Conclusion : Levels of 25-OH-Vitamin D in beta thalassemia children were lower than in non-thalassemic children. Levels of 25-OH-Vitamin D in children with beta HbE thalassemia are lower than in children with beta thalassemia major.

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