

POSTER PRESENTATION

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# Seroprevalence of hepatitis C virus markers in multi-transfused children with beta-thalassemia

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## Background

To study the seroprevalence of hepatitis C virus in multi-transfused children with  $\beta$ -thalassemia and compared with non transfused children and healthy controls.  $\beta$ -thalassemic children fail to thrive, with growth and developmental retardation and suffer microcytic hypochromic anemia. Since regular blood transfusions are given to maintain haemoglobin at a safe level, these children are at a high risk of acquiring hepatitis C virus through transfusions.

## Methods

Study group, consisted of children 2-13 years with  $\beta$ -thalassemia and received more than 5 transfusions. Matched control group consisted of 30 children with  $\beta$ -thalassemia and no transfusion. Control group, consisted of 30 normal healthy children serum samples from all three groups were tested for antibodies to hepatitis C virus using commercial ELISA kits.

## Results

Study showed 32% anti H hepatitis C virus positivity in multi-transfused and 0% in matched and healthy control groups. Hepatitis C virus infection showed a significant increase in relation to the number of transfusions received.

## Conclusion

This observation is of great concern, as these children are at a risk of developing chronic hepatitis, cirrhosis and hepatocellular carcinoma. Since vaccination against hepatitis C virus is not available, highly sensitive and specific screening methods of donor blood in blood banks must be made mandatory.

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