

## Short Communication

# Evaluation of IgG and IgM antibodies against Varicella zoster virus in children with acute lymphoblastic leukemia

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## Abstract

**Background and Objective:** Varicella zoster virus (VZV) can cause a moderate disease in children, but with high risk of serious disease or death in children with acute lymphoblastic leukemia (ALL). Vaccination from infection can be safe, immunogenic, and effective in children with leukemia. This study was done to evaluate the IgG and IgM antibodies against VZV in children with acute lymphoblastic leukemia.

**Methods:** The descriptive-analytic study was performed on 66 children who were on chemotherapy in Dr Shigh hospital in Mashhad, Iran during 2012. Patients were received VZV vaccine. The title negative or positive serum sample for IgG-anti-VZV avidity was determined by using a test kit before and after injection of vaccines VZV for considering the efficacy of vaccines on pediatric patients.

**Results:** Title serum sample IgG were positive in 32.6% patients, these children have history of chicken pox disease and to be safe against of VZV. 78.3% of the patients were negative for IgG antibody and sensitive against of VZV.

**Conclusion:** Children with ALL receiving chemotherapy are sensitive to chicken pox disease according to negative IgG titer against VZV.

**Keywords:** Acute lymphoblastic leukemia, Varicella zoster virus, Antibody, Child

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Received 15 Jul 2015

Revised 13 Jan 2016

Accepted 23 Feb 2016