
**Abstract**
After exposure to many toxic chemicals, NK function can be decreased significantly. Weeks or months later, natural killer (NK) function can rebound to normal levels in some and can be suppressed for prolonged periods of time in other patients. In view of this, we decided to study the effect of buffered vitamin C on NK, T and B cell function in patients who had been exposed to toxic chemicals. After the first blood draw, 55 patients immediately ingested granulated buffered vitamin C in water at a dosage of 60 mg/Kg body weight. Exactly 24 hours later, blood was again drawn for a follow-up study of NK, T and B cell function. Vitamin C in high oral dose was capable of enhancing NK activity up to ten-fold in 78% of patients. Lymphocyte blastogenic responses to T and B cell mitogens were restored to the normal level after vitamin C usage. Signal transduction enzyme protein kinase C (PKC) appeared to be involved in the mechanism of induction of NK activity by vitamin C. We conclude that immune functional abnormalities can be restored after toxic chemical exposure by oral usage of vitamin C.