

## **Serological Screening of Cytomegalovirus Infection among Sudanese Patients with Leukemia, Breast and Prostate Cancers at Radiation-Isotope Center in Khartoum**

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**Abstract :** Introduction: Cytomegalovirus (CMV), a common virus, usually causes asymptomatic infections in immunocompetent hosts; however, it may lead to serious complications especially in cancer patients. Objectives: This study was conducted to determine the seroprevalence of human cytomegalovirus (HCMV) among leukemia, breast and prostate cancer patients attending at Radiation Isotope-Center-Khartoum (RICK) from April to August 2016. Material and Methods: A total of 91 subjects were included: 30 leukemic, 22 breast cancer and 29 prostate cancer patients. 10 of them were healthy and used as control group, serum samples were collected and tested for CMV IgG & IgM using enzyme-linked immune sorbent assay (ELISA). Result: Of the control group, 9/10 (9.9%) were seropositive for CMV IgG and 1/10 (1.09%) were sero positive for IgM. Also, all cancer groups demonstrated presence of IgG antibody classes as: The percentage of positive results in prostate, breast cancer and leukemia were 35.8 %, 37.2%, and 35.3% respectively. Conclusion: There was no significant correlation between leukemia, breast, prostate and HCMV.

**Keywords :** cytomegalovirus, serodiagnostic, breast cancer, leukemia

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