ABSTRACT

THE CORRELATION BETWEEN SERUM LEVELS OF Ig A ANTI VCA CHANGES WITH THE PRIMER TUMOR VOLUME AFTER CHEMOTHERAPY CISPLATIN – PACLITAXEL IN NASOPHARYNGEAL CARCINOMA PATIENTS

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Background: Nasopharyngeal carcinoma (NPC) is a malignancy of the head and neck which had the highest incidence with first position in Indonesia. Most people with NPC come at an advanced stage. Epstein-Barr virus (EBV) related NPC post-therapy monitoring requires repeated painful biopsy and pathology examination. Tumor detection and treatment as early as possible is important for survival of patients. Nowadays, EBV serology has been used as a NPC prognostic marker and therapeutic response monitoring include immunoglobulin A (IgA) anti-viral capsid antigen (VCA) EBV. But the relationship between changes in levels of anti-VCA IgA serum with primary tumor volume change (PTV) post cisplatin-paclitaxel chemotherapy in patients with nasopharyngeal carcinoma has not been investigated yet, so that researchers feel the needs to be explained.

Purpose: This study aims to prove about the correlation between changes in serum levels of the antibody Ig A anti VCA with PTV changes after cisplatin-paclitaxel chemotherapy in NPC patients.

Study design: The research uses pre-post test design without comparison with cohort longitudinal approach.

Methods: Eighteen samples were obtained from of Ig A anti VCA serum titer checked pre and post chemotheraphy and also the PTV. ELISA was used as the tool to check the Ig A anti VCA serum level. Pearson test was use to notice the relation between serum levels of Ig A anti VCA changes with the primer tumor volume post chemotherapy cisplatin-paclitaxel in NPC patients.

Result: The result showed changes in levels of serum IgA anti-VCA pre and post chemotherapy with cisplatin-paclitaxel obtained Δ mean of 1.252 with 9.388 as standard deviations. Changes in the primary tumor volume (PTV) before and after cisplatin-paclitaxel chemotherapy obtained Δ mean of 31.616 and 35.310 as standard deviations. Statistical test using Pearson correlation obtained correlation coefficient (r) - 0.190 and p = 0.450. The results of this data showed that the correlations between changes in serum levels of anti VCA IgA with the changes of primary tumor volume after cisplatin-paclitaxel chemotherapy in patients with nasopharyngeal carcinoma were not significant (p> 0.05).

Conclusion: There is no correlation between serum levels of Ig A anti VCA changes with the PTV post chemotherapy cisplatin-paclitaxel in NPC patients.

Keywords: Ig A anti VCA, primer tumor volume (PTV), chemotherapy cisplatin- paclitaxel, nasopharyngeal carcinoma