Plasma Epstein Barr Virus (EBV) DNA levels have been shown to correlate with disease burden and is an independent predictor for disease recurrence and survival. Patients with tumour recurrence were found to have elevated plasma DNA levels compared to those in remission. However, the cut-off level used is variable in different studies. In most studies, EBV serology or plasma EBV DNA level is a better marker.

RESULTS

Post-treatment Anti-EBV VCA IgA, Anti-EBV Iga and plasma EBV DNA levels at diagnosis between the two groups did not show any statistically significant trends. The recurrence or 24 month post-treatment Anti-EBV VCA IgA, Anti-EBV Iga and plasma EBV DNA levels between the 2 groups did not show any statistically significant trends (Table 4).

Conclusions

In our study the range of plasma EBV DNA levels in patients with recurrence and those in remission overlap significantly (Table 2). Using a single cut off value to monitor for recurrence may result in significant false positive rate and further unnecessary tests.

EBV serology trend post-treatment is not useful as a marker for surveillance of the majority of Anti-EBV VCA IgA and Anti-EBV Iga levels at diagnosis were at least 150 or higher in both groups of patients and most remained at that elevated level post treatment. Other studies have also showed similar findings. When we compared the trend of plasma EBV DNA levels at recurrence to the level at diagnosis 68.8% of patients with recurrence showed a downward trend and 20.5% of the patients in remission showed an upward trend. Even when we compared the plasma EBV DNA levels at recurrence to the levels at the preceding treatment levels, 53.8% of patients with recurrence showed a downward trend. When we compared the plasma EBV DNA level is less sensitive in detecting postirradiation recurrent NPC compare to RT naïve newly diagnosed NPC patients. They postulates that the radiation may have affected the EBV production/maintenance mechanism without totally affecting the reproductive capacity of the tumor cells.

REFERENCES