found EBV DNA in 24% of EBV negative lymphoma [24].

The molecular nature of EBV DNA in these tumors elucidated by Fan and Gullay 2001, they found that circulating EBV DNA exists as short fragments of less than 200bp. This implies that the increase of EBV DNA is due to tumor release of EBV DNA fragments instead of virion reactivation and these fragments are naked molecules not protected by viral protein coat [27], They found a relationship between circulating EBV DNA and apoptosis that DNA is fragmented by caspase-activated DNAase and resulting in DNA fragments with length in multiple of nucleosomal DNA.

It's concluded that EBV could be considered as a target in the effective diagnosis of EBV associated tumors. EBV DNA load could be a promising marker for the patients who express EBV load above the cutoff value. The QC-PCR assay allow accurate quantification of EBV load and show promise as a tool to assist in diagnosis and management of EBV related lymphoma patient, it is potentially useful in the diagnosis and follow up as well as in the assessment of the efficiencies of chemotherapeutic regimens consequently, in these cancers EBV DNA may be considered as a real tumor biomarker.

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