

**Angioimmunoblastic T-cell lymphoma:  
histological progression associates with EBV  
and HHV6B viral load. Br J Haematol**

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摘要

**Abstract**

The clinical and histological presentations of angioimmunoblastic T-cell lymphoma (AITL) often mimic an infectious process. Epstein-Barr virus (EBV) and human herpes virus (HHV6) are known to be associated with AITL, but whether these viral infections play a role in its pathogenesis is unclear. It also remains to be investigated whether there might be other viruses associated with AITL. We first screened 26 well-characterised cases of AITL for herpesvirus by polymerase chain reaction (PCR) with universal primers and found evidence of only EBV and HHV6B infection. Subsequent PCR using virus-specific primers demonstrated EBV and HHV6B infection in 40/49 biopsies (36/42 cases) and 21/49 biopsies (19/42 cases) of AITL respectively with both viral infections found in 17/49 specimens (15/42 cases). Importantly, simultaneous infection with both viruses was found only in specimens showing histological pattern II (n = 2) or III (n = 15). Interestingly, among specimens containing both viruses, there was a tendency towards an inverse correlation between the EBV and HHV6B viral load as shown by quantitative PCR. In specimens positive only for EBV, the viral load was significantly higher in specimens with histological pattern III than those with pattern II. High EBV load was also significantly associated with B-cell monoclonality. Double EBV encoded small RNA (EBER) in situ hybridisation and immunohistochemistry indicated that EBV-infected B cells had a late postgerminal centre immunophenotype. Our results demonstrate an association between EBV and HHV6B infection and the histological progression of AITL, suggesting that these viruses may play a role in the pathogenesis of this lymphoma