The pattern and frequency of t(14;18) translocation and immunophenotype in Asian follicular lymphoma

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Abstract

AIMS: Follicular lymphoma is frequently associated with t(14;18)(q32;q21) translocation. This study was undertaken to determine the pattern of Bcl-2, CD10 and Bcl-6 expression in relation to t(14;18) translocation in follicular lymphoma from a cohort of a multi-ethnic Asian population.

METHODS AND RESULTS: Sixty-two cases of follicular lymphoma were retrieved for immunohistochemistry, and t(14;18) translocation analysis by polymerase chain reaction and fluorescent in-situ hybridization techniques. Bcl-2 expression was present in 74% of the cases. CD10 expression was also relatively low (61%), with decreasing frequency of expression in high-grade tumours. Bcl-6 protein was expressed in most of the tumours (88%) regardless of the tumour grade. The t(14;18) translocation was detected in 46 cases (74%) with an extremely high rate of t(14;18) translocation in ethnic Indian cases (100%).

CONCLUSION: The frequency of t(14;18) translocation in this series of follicular lymphomas was higher when compared with previous Asian reports, but in accordance with European and North American findings. CD10 expression is strongly associated with a t(14;18) translocation event, but the overall CD10 expression was relatively low, possibly due to the high proportion of high-grade tumours in the series. t(14;18) translocation was not associated with Bcl-2 or Bcl-6 expression.

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