Immunohistochemical expression of Mum-1, Oct-2 and Bcl-6 in systemic anaplastic large cell lymphomas

Arzu Saglam, and Aysegul H Uner

Hacettepe University Faculty of Medicine, Department of Pathology, Sihhiye, Ankara, Turkey

ABSTRACT

Aims and backround. Several transcription factors predominantly used for B-cell lineage identification are also expressed in a small percentage of T cells within germinal centers and interfollicular areas. The aim of the study was to evaluate the expression of Mum-1, Oct-2 and Bcl-6 in systemic anaplastic large cell lymphoma.

Methods. Thirty cases of anaplastic large cell lymphoma were retrieved from our archives and tissue microarray constructed. Immunohistochemistry was carried out using an avidin-biotin peroxidase complex method.

Results. A predominance of nuclear staining was observed for all transcription factors. Mum-1 was positive in all but one case (96.7%). Half of the cases displayed Oct-2 expression (15/30 cases). A considerable number of cases also had Bcl-6 expression (9/30). Bcl-6 staining was noted to be more common in ALK positive cases.

Conclusion. Our findings emphasize that these markers are not restricted to B-cell lineage and that extensive expression can be observed in anaplastic large cell lymphoma of T/null cell phenotype.

Key words: anaplastic large cell lymphoma, Bcl-6, Mum-1, Oct-2.

Acknowledgments: The authors would like to extend their gratitude to Arda Gunay for preparation of the tissue array blocks, Cigdem Gunay for performing the immunohistochemial staining and to Lokman Kale for archival assistance.

Correspondence to: Aysegul Hasegeli Uner, MD, PhD, Prof of Pathology, Department of Pathology, Hacettepe University Medical School, Sihhiye, Ankara, 06100 Turkey. Tel +90-312-3051563; fax +90-312-324 2009; e-mail unera@hacettepe.edu.tr

Received February 16, 2009; accepted May 14, 2009.