

TCR V beta gene analysis in folliculotropic mycosis fungoides does not show antigen specific restriction

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Folliculotropic mycosis fungoides (FMF) is a variant of cutaneous T cell lymphoma characterized by predominant infiltration of hair follicles by lymphoma cells. Folliculotropism may suggest that antigen-stimulation by particular antigens present in the hair follicle may contribute to the pathogenesis of FMF. To test this hypothesis, we identified the rearranged T-cell receptor (TCR) V beta genes in a series of 20 cases (21 samples) with clinically and histologically well-characterized FMF as well as 10 control cases (10 samples) of conventional mycosis fungoides MF. The analysis was performed by using a multiplex PCR and BIOMED-2 primers³, followed by sequencing of the monoclonal PCR products. In 3 FMF patients different T-cell clones or additional to a persistent clonal T-cell rearrangements were found. In FMF no restriction of a specific TCR V beta gene family was demonstrated. Similarly, conventional MF showed non-restricted TCR V beta gene rearrangements, as has been demonstrated before. Our results indicate that FMF, as has been demonstrated for MF before, does not arise from TCR V beta-restricted T cells, including NKT cells. Whether antigen-stimulation plays a role in the pathogenesis of FMF is still an open question, but our results do not indicate the involvement of restricted antigens.

Biography

Panagiota Mantaka has been working as a specialist in dermatology and venerology since January 2009 working since then as a Clinician and Research Fellow by performing her Ph.D. thesis in the field of primary cutaneous lymphomas. She has already published some papers in the field of folliculotropic mycosis fungoides and presenting successfully in several EORTC/ISCL meetings (2010, 2012 and 2013) recently and in the past.

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