Poster 8. CHEMOKINE RECEPTOR REPERTOIRE REFLECTS MATURE T-CELL LYMPHOPROLIFERATIVE DISORDER CLINICAL PRESENTATION

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Introdução e objectivos

The World Health Organisation classification of mature T-cell lymphoproliferative disorders, combines clinical, morphological and immunophenotypic data. The later majorly contributes for the classification, as well as to the understanding of the malignant T-cell behaviour. The fact that T-cell migration is regulated by chemokines should, in theory, enable us to identify tissue tropism and organ involvement by neoplastic T-cells, through monitoring of chemokine receptor surface expression.

Material e métodos

To address this issue we compared, by flow cytometry, the expression of several early and late inflammatory, homeostatic, and organ specific chemokine receptors on peripheral blood T-cells from normal individuals and patients with T-cell large granular lymphocytic leukaemia and peripheral T-cell lymphoma.

Resultados e conclusões

T-cell large granular lymphocytic leukaemia cells mainly express late inflammatory chemokine receptors (CXCR1 and CXCR2), whereas peripheral T-cell lymphoma cells usually exhibit the expression of one or more organ homing receptors (CCR4, CCR6 and CCR7). Nevertheless, no clear correlation was found between CCR4 and CCR7 expression and skin and lymph node involvement, respectively. Compared to their normal counterparts, lymphoma T-cells displayed an exacerbated CCR4 expression while leukaemia T-cells showed an abnormally high CXCR1 and CXCR2 expression.

Further analysis revealed that, in leukaemia patients, the percentage of neoplastic cells expressing CCR5 correlates directly with lymphocytosis. In addition, in the case of CD8 T-cell leukaemia patients, an inverse correlation with neutropenia was found. In lymphoma patients, higher CCR4 and CCR7 expression is accompanied by lower/absent CCR5 expression and seems to correlate with worst disease progression.

Contacto

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