CCR10 is expressed in cutaneous T-cell lymphoma.

Cutaneous T-cell lymphoma (CTCL) is characterized by recruitment of malignant T-cell clones into the skin. The mechanisms involved in tumor homing are still not fully elucidated, though chemokines and chemokine receptors have been suggested to play a role in the pathogenesis. Here, we demonstrate extensive expression of CCR10 in skin biopsies of patients with Sezary syndrome (SS, n = 3), mycosis fungoides (MF, n = 2) and unspecified CTCL (n = 3). In addition, we expand prior findings of CXCR3 expression in MF to other entities of CTCL. Expression of CCR5 was detected in 2 of the examined skin biopsies. The functionality of CCR10 and CXCR3 in SS was demonstrated using the SS T-cell line HUT78. Our data support a potential role of CXCR3 in CTCL and strongly suggest that CCR10 and its ligand CCL27 may contribute to the skin infiltration of malignant T-cells in this group of lymphoproliferative disorders.