Abstract

CTLA-4 (Cytotoxic T lymphocyte-associated Ag-4) is a molecule expressed on the surface of activated T lymphocytes, the function of CTLA-4 is regulate T cell homeostasis and peripheral immune tolerance, inhibiting T cell activation. Two mechanisms have been postulated to mediate CTLA-4 inhibition of T cell responses: Negative signaling and competitive antagonism of CD28:B7-mediated costimulation. The different participating molecules in T cell activation and T cell inactivation have been analyzed to design therapeutic strategies for immune tolerance. The progress has been based upon interference with lymphocyte activation, costimulation, or cytokine signals, but It has been very difficult to design therapeutic strategies that specifically enhance endogenous inhibitory pathways. CTLA-4 has been the target of several studies, that have brought forward different novel strategies to induce immunosuppression, some of them Ag-specific, that have become a new basis for the treatment of autoimmune disease and tissue transplantation rejection.

Keywords

T lymphocyte, Cytotoxic T lymphocyte-associated Ag-4, immune tolerance, immunosuppression, autoimmunity, transplant / SALUD UNINORTE. Barranquilla