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## Dendritic cells modulated by CTLA4-Ig ameliorate experimental colitis

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Experimental colitis is characterized by chronic inflammation of the gastrointestinal tract of mice with overlapping features of inflammatory bowel diseases in humans. As it is known that dendritic cells (DCs) can interfere on the balance of immunity and tolerance, we evaluated the effects of adoptive transfer of bone marrow derived dendritic cells (BMDCs) pulsed with CTLA4-Ig, a recombinant mouse protein which binds both B7-1 and B7-2 molecules, in experimental colitis. CTLA4-Ig-modulated BMDCs were administered to BALB/c mice by intravenous route prior to instillation of TNBS. Five days after induction of colitis, spleen and colon were removed for immunological and histological analysis. Adoptive transfer of modulated BMDCs reduced the severity of colitis as observed by reduction of weight loss, proliferative response, frequency of Th17 cells, and augment of the frequency of regulatory T cells in culture. Histological analysis of intestinal segments showed that the adoptive transfer of CTLA4-Ig-modulated BMDCs ameliorates the loss of integrity of the colon tissue, reduces macrophage infiltration, and improves tissue inflammation. To our knowledge, this is the first description of the beneficial effects of treatment with BMDC modulated by CTLA-4-Ig in the experimental colitis, at histological and immunological level.

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