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**CIRCULATING CYTOKINE PROFILE IN PRIMARY
SJÖGREN'S SYNDROME**

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Sjögren's syndrome is a chronic inflammatory autoimmune disorder affecting 4 million people in the United States. The principal target organs are the salivary and lacrimal glands, resulting in dry mouth and dry eyes. However, several other organ systems may also be involved. The disease may occur alone (primary) or in association with a variety of connective tissue diseases (secondary). Cytokines are thought to play an important role in the pathogenesis of primary Sjögren's syndrome by promoting cellular and humoral autoimmune processes. The aim of the present study was to evaluate the expression pattern of cytokines in serum of primary Sjögren's syndrome patients. Serum samples were collected from 20 primary Sjögren's syndrome patients and 20 healthy controls. The levels of selected cytokines were measured in duplicate using the Luminex bead-based assay. Mean cytokine levels between groups were compared, and correlations between these levels as well as clinical and laboratory measures of disease activity were examined. Of the cytokines tested, levels of certain pro-(IL-1 α , IL-1 β , IL-8, IFN- γ , TNF- α) and anti- (IL-10, IL-12p40 and 12p70) inflammatory types were significantly higher in serum of primary Sjögren's syndrome patients compared to healthy controls. They correlated negatively with unstimulated whole saliva flow and tear flow determined by Schirmer's test, and positively with titers of anti-Ro/SSA and anti-La/SSB autoantibodies. These results suggest overexpression of both pro- and anti-inflammatory cytokines in primary Sjögren's syndrome. These cytokines may be of interest in assessing the response to treatment protocols or in monitoring the disease progression. This is currently a continuous study analyzing more clinical and laboratory measures in order to correlate with the cytokine levels.



Poster Number: Session: