

**INCREASED LEVELS OF INTERLEUKIN-12 AND INTERLEUKIN-18 IN  
BRONCHOALVEOLAR LAVAGE FLUID OF PATIENTS WITH PULMONARY  
SARCOIDOSIS**

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Sarcoidosis is characterized by a diffuse alveolar inflammatory process, although bronchial airways are often involved. We studied prospectively 43 patients (23 women, 20 men) of the median age 39.7 years (range 29–64) with sarcoidosis (BBS) and 13 normal subjects (6 women, 7 men) of the median age 48 years (range 39–63). IL-12 and IL-18 levels were measured using ELISA kits. The Mann-Whitney U-test and the Spearman correlation test were used for statistical analysis (Statistica 5.0). Spirometry and body plethysmography were performed using Elite DL Medgraphics body box. BBS group was characterized by a significantly higher median range of: plasma ACE concentration (72 vs. 34 U/L,  $p < 0.0001$ ), Lymphocyte percentage (34% vs. 14%,  $p < 0.0001$ ), CD4+ cells (59% vs. 36%) and CD4/CD8 ratio (4.2 vs. 1.99,  $p < 0.0001$ ). The IL-12 BALF levels were significantly higher in sarcoidosis patients than in healthy subjects (4.1 pg/mL vs. 3.2 pg/mL,  $p < 0.001$ ). In addition, IL-18 levels were significantly increased in BALF samples (11.1 pg/mL vs. 6.15 pg/mL,  $p < 0.0001$ ). Correlations within BBS group showed negative correlation between IL-12 BAL and ACE plasma levels ( $r = -0.33$ ,  $p < 0.05$ ) with no correlations between IL-12 BAL levels and other major disease activity markers. There was no such correlations in regards to IL-18 BAL levels. Our data suggest a potential role of IL-12 and IL-18 in the local immunologic response in pulmonary sarcoidosis. Further large-scale studies are needed to define the precise role of IL-12 and IL-18 in the immunopathogenesis of this disorder.