

ELEVATED LEVELS OF IL-27 AND IL-29 IN BRONCHOALVEOLAR LAVAGE FLUID FROM SARCOIDOSIS PATIENTS.

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Granulomas in sarcoidosis have recently been described as containing interleukin (IL)-27, possible Th1 immunomodulator. Moreover, IL-27 has been shown recently as potent lung fibrosis inhibitor. IL-29, a member of the interferon lambda family, modulates the Th1/Th2 response in sarcoidosis. IL-27 and IL-29 are expressed in alveolar and bronchial epithelial cells.

The aim of the study was to evaluate the concentration (Elisa) of IL-27 and IL-29 in BALF (BronchoAlveolar Lavage Fluid) in 25 sarcoidosis patients (second stage) and 15 healthy volunteers as control group. The BALF levels of IL-27 and IL-29 were higher in sarcoidosis group than in control [IL-27: 14.98±0.1 vs 14.87±0.09 pg/ml, p=0.001; IL-29: 22.78±5.5 vs 18.74±4.1 pg/ml, p=0.021]. In sarcoidosis group we found correlations between the BALF levels of IL-27 and CD4% (r=-0.682, p=0.029) as well as IL-29 and lymphocytes% (r=0.551, p=0.041). The levels of IL-29 negatively correlated with DLCO (r=-0.565, p=0.044). Receiver-operating characteristic (ROC) curve was applied to find the cut-off the BALF levels of IL-27 and IL-29 (BBS vs Healthy, IL-27: 14.92 pg/ml; IL-29: 20.49 pg/ml).

We conclude that measurements of IL-27 and IL-29 in BALF may have usefulness in clinical evaluation of lung sarcoidosis patients.