their high expression of MHC class II (HLA-DR) and co-stimulatory (CD80 and CD86) molecules suggests an important antigen-presentation function of ABC, which together with their unique FcγR family expression pattern, warrants further functional characterisation.

Figure 1. Differential gene expression in ABCs from early RA patients compared to early PsA patients (A) and healthy controls (B). A NanoString nCounter Technologies chip was used to assess gene expression. Raw counts were normalised to the housekeeping genes. Sample quality was then assessed using the arrayVerifyMeta package. Gene expression profiles between different donor groups was assessed using the DESeq2 R package. In both hierarchical clustering heatmaps gene expression intensities were log2 transformed and their z-scores are displayed as colours ranging from yellow (low expression) to red (high expression) as shown in the key.

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AB0023

DENDRITIC CELLS AS A PROMINENT MARKERS OF AUTOIMMUNE DISEASES

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Background: Dendritic cells (DCs) are known to contribute to the pathogenesis of different autoimmune diseases. It is clear nowadays the role of DCs in rheumatoid arthritis (RA) but not well investigated in Axial spondyloarthritis (AxSpA). DCs are heterogeneous population and can be divided into groups: myeloid (mDCs) and plasmacytoid (pDCs). DCs can induce both immune response and tolerance.

Objectives: To understand the subpopulations of peripheral blood myeloid and plasmacytoid DCs in patients with early stage of RA (duration of illness up to 12 months) and AS.

Methods: The study include sixty five patients with early forms of diseases including 55 patients with RA and 10 patients with AxSpA. Diagnosis RA was established according ACR/EULAR criteria (2010). Diagnosis AxSpA was established according ASAS criteria. All patients received conventional synthetic DMARDs. Thirty patients with osteoarthritis (OA) used as a control group. Analysis of the content of the B-lymphocytes, myeloid and plasmacytoid DCs was carried out by flow cytometry. B-lymphocytes, subtypes of peripheral blood DCs were characterized by the following phenotypes: myeloid DCs (CD14+CD19-HLA-DR+ CD11c+ CD123-), plasmacytoid DCs (CD3-CD14-CD19-HLA-DR+ CD11c+CD123+), B-lymphocytes (CD19+). Analyses were performed before treatment and after 3 and 6 months.

Results: Patients with early RA are characterized by significant evaluation of the population of myeloid DCs in comparison of patients with osteoarthritis (25.3% vs 21.5, p<0.005). Furthermore, the difference was found in the number of cells with the phenotype B-lymphocytes: 5.7% vs 3.1%, (p = 0.0007). No significant differences were observed in the number of plasmacytoid DCs. After 3 and 6 month of observation we detected reducing amount of myeloid DCs 26.7% vs 20.1% vs 16.4% respectively. Disease activity according to DAS28 dropped to low (4.32 to 3.06, p=0.03). Patients with AxSpA are characterized a lower mDCs levels in comparison of RA (19.3% vs 26.7, p=0.07). After 6 month of investigation we detected decreasing mDCs (19.3% vs 16.4% respectively. The percent of pDCs were constant and did not differ from the level of healthy donors.

Conclusion: The data obtained indicate that early form of rheumatic diseases namely rheumatoid arthritis and axial spondyloarthritis have the common features such as the dominance of mDCs and their decreasing in reduction of activity of disease.

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