Conclusion: Imbalances in the numbers and functions of specific lymphocyte cell subsets are key pathogenic derangements in AS, and these insights are leading to changes in clinical practice. The present study provided further evidence on the function and underlying mechanism of lymphocyte subsets, which may be useful in the diagnosis and treatment of ankylosing spondylitis.

REFERENCES

Disclosure of Interests: None declared

AB0036C

IMMUNOPHENOTYPIC CHARACTERIZATION OF T-CELL IN PATIENTS WITH RHEUMATOID ARTHRITIS TREATED WITH GOLIMUMAB

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Background: Golimumab is a human anti-TNF monoclonal antibody that has shown efficacy in RA. In the RA pathophysiology, the elevation of TNF modulates the cellular immune response, which leads to a sustained activation of T-cell response; however, it is unknown whether anti-TNF interferes with the immunophenotype of T-cell.

Objectives: To evaluate activation (CD25, CD69) and exhausted (PD-1, TIM-3, LAG-3, CTLA-4) markers of T-cells in RA patients treated with Golimumab.

Methods: We included 14 patients with RA diagnosis (Criteria ACR/EULAR 2010), with moderate to severe activity; 11 non-responders to synthetic DMARDs (NR-DMARDs) and 3 responders to synthetic DMARDs with pharmacological toxicity (R-DMARDs). All patients were treated with Golimumab during 24 weeks. The questionnaire SF-36, DAS28-CRP, power Doppler signal and expression of CD25, CD69, PD-1, TIM-3, LAG-3 and CTLA-4, in T-cell were evaluated at 0 and 24 weeks.

Results: Clinical variables evaluated in patients with Rheumatoid Arthritis are shown in tables 1 and 2.

The frequency of LAG-3+ on CD4+ T-cells increased after 24 weeks of treatment with Golimumab (p = 0.013) (figure 1). The expression of LAG-3 in CD4+ T-cells (r = -0.586, p = 0.028) (Figure 2) and CD8+ T-cells (r = -0.617, p = 0.019) (Figure 3) inversely correlated with DAS28-CRP after treatment. At the beginning of treatment NR-DMARDs patients showed higher expression of CD25 in CD8+ T-cells and lower expression of TIM-3 in CD4+ and CD8+ T-cells with respect to R-DMARDs. After 24 weeks of treatment, a lower frequency of CD69+ and LAG-3+ T-cells was found and increased of CD25+ T-cells compared to R-DMARDs.

Conclusion: Golimumab treatment increased the expression of LAG-3 in T-cells, suggesting a negative regulator of antigen presentation of T-cells.

REFERENCES

Disclosure of Interests: None declared

AB0037

NEUTROPHIL GRANULOCYTES ARE PRIMED IN CHILDREN WITH JUVENILE IDIOPATHIC ARTHRITIS (JIA)

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Background: The adaptive as well as innate immunity is involved in JIA pathology. Neutrophils are key mediators of the innate immune response and is the most abundant cell type found in JIA synovial fluid. Studies of neutrophils in JIA have shown transcriptional abnormalities and neutrophil-derived S100A proteins have shown a potential role as biomarkers. Still, studies of neutrophils in JIA are scarce.

Results: Clinical variables evaluated in patients with Rheumatoid Arthritis are shown in tables 1 and 2.

Disclosure of Interests: None declared

Innate immunity in rheumatic diseases