**IMBALANCES OF TH17/TREG IN CARDIOVASCULAR EVENTS OF PATIENTS WITH ANKYLOSING SPONDYLITIS**

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**Background:** Ankylosing spondylitis (AS) is a common inflammatory joint disease affecting articulations of axial skeleton and asymmetrical peripheral arthropathy. It has been highlighted that patients with AS exhibit an increased risk of cardiovascular diseases (CVD) compared to the general population [1]. However, little is known about the relationship between cardiovascular burden in AS patients and Th17/Treg imbalance.

**Objectives:** We aimed to investigated the relationship between cardiovascular events in AS patients and the status of T cell subsets. Furthermore, we want to identify other clinical and/or laboratory features which are associated with the cardiovascular risk in AS patients.

**Methods:** The study included 32 AS patients with cardiovascular diseases and 32 age-matched AS patients as controls. All the AS patients were hospitalised at the Second Hospital of Shanxi Medical University and met the diagnostic criteria for AS revised in New York in 1984. We collected demographics, laboratory features [erythrocyte sedimentation rate (ESR), c-reactive protein (CRP), DD (D-dimer), PLT (platelet count)], and absolute counts of lymphocyte and CD4+ T cell subset. The absolute numbers of lymphocytes and CD4+ T cells in peripheral blood were measured by Flow Cytometer.

**Results:** 1. There was statistically significant decrease in Th17 levels (P=0.012) in the AS with CVD group compared to the AS group, while the Treg cells number (P=0.430) and the ratio of Th17/Treg (P=0.426) have no statistically significant differences; 2. DD was significantly increased in AS patients with CVD; 3. The Treg/TCD, Th17 and Th17/Treg were decreased in AS patients with CVD compared to the AS group, while the Treg cells number (P=0.426) and the ratio of Th17/Treg (P=0.426) have no statistically significant difference.

**Discussion of Interests:** None declared.