OBJECTIVES: the inflammatory response. Diseases characterized by the secretion of cytokines related to the stimulation of inflammatory rheumatic diseases.

RESULTS: There were no significant differences through the method of control group. In both groups, the number of regulatory cells – Treg (CD4+CD25+FoxP3) was reduced: in group 1 - to 2.5±0.03%; in group 2 - to 2.3±0.02%, while in the control group it was 4.2±0.5%, p<0.001. The result of our study confirms that the development of RA and COVID is associated with the decrease in the number of Treg cells responsible for ensuring peripheral tolerance and preventing the development of autoimmune diseases.

DISCUSSION OF INTERESTS: None declared.

REFERENCES:

Disclosure of Interests: None declared.


AB0022

SELECTIVE ESTROGEN RECEPTOR MODULATORS AND TISSUE-SELECTIVE ESTROGEN COMPLEX DO NOT SHARE ESTROGENIC EFFECTS ON IGG SIALYLATION IN AUTOIMMUNE CONDITIONS

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BACKGROUND: Women entering menopause, with a decrease in estrogen levels, display an increased incidence of rheumatoid arthritis (RA). Estrogen (E2) treatment has beneficial effects on IgG pathogenicity by altering the sialylation grade which affect the binding ability to FcR. E2 replacement may therefore be beneficial in pre-RA patients having autoantibodies. Exposure to estrogen is associated with negative side effects, therefore selective estrogen receptor modulators (SERMs) have been developed with estrogenic protective effect on bone but minimal impact on the reproductive system1. The SERM, Bazedoxifene (BZA), as well as tissue-selective estrogen complex (TSEC), a combination of conjugated estrogen and BZA, have been approved for treatment of postmenopausal bone loss.2,3

STUDY AIMS: To determine if estrogen receptor agonists like E2 and SERMs like BZA influence the sialylation status in vivo.

MATERIALS AND METHODS: Five different groups: 1) group treated with E2, 2) BZA, 3) TSEC, 4) vehicle, 5) control. Thirty mice per group were used in these experiments. The mice were studied at 6 months of age at 4 different time points: pre-menopause, early menopause (2 months), late menopause (8 months) and post-menopause (12 months).

RESULTS: Over the course of the study, a progressive unidirectional decline in sialylation was observed in the control group, while E2 and BZA groups demonstrated stabilizing or increasing sialylation levels. The TSEC group showed a trend similar to E2, suggesting a potential additive effect.

CONCLUSION: Treatment with E2 and BZA leads to significant differences in the sialylation status compared to the control group, indicating a possible protective effect on IgG pathogenicity. Further studies are needed to investigate the potential of SERMs like BZA in treating RA and other autoimmune diseases.