REFERENCES:


[6] A20 gene expression was knocked out in KRT14+ cells, namely ductal epithelial cells.

[7] Results: In submandibular SGs of A20−/− mice at 30 weeks of age, 10% of all cells were CD45+ leukocytes and 3% were CD3+ T cells, both significantly more than controls. B cell proportion increased over time in A20−/− mice, but was not significantly different to controls. CD45+ cells formed immune foci (>50 CD45+ cells together) localised to striated ducts. Expression of the pro-inflammatory cytokine/chemo-kine IFNγ, TNFα, IL-6, CXCL10 and CXCL13 was also significantly greater in A20−/− mice. Functionally, both volume and mucin 10 content of whole stimulated saliva from A20−/− mice was significantly reduced compared to controls.

Conclusions: We present a model for epithelial cell involvement in pSS SG pathology development. We confirm that saliva production defects, foci formation and striated duct invasion can be triggered solely by immune activated epithelial cells.

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Disclosure of Interest: None declared
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AB0177
MORPHOLOGICAL HEART CHANGES IN ANIMALS WITH EXPERIMENTAL SYSTEMIC LUPUS ERYTHEMATOSUS

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Background: Heart pathology in systemic lupus erythematosus (SLE) refers to the most common manifestations of the disease and largely determines its prognosis. The pathogenesis of its manifestations is multifactorial and involves various pathological processes in different heart structures. In the present study, we investigated the possible role of cardiovascular abnormalities in the pathogenesis of SLE-related causes of premature mortality in the United States. The study population consisted of 2714 consecutive patients with SLE, who were admitted to the cardiology department of the University Hospital between 2000 and 2017.

Methods: We used a standardized protocol for the diagnosis of heart disease, which included a clinical examination, electrocardiography, echocardiography, and cardiac catheterization. The main outcomes of interest were the presence of valvular heart disease, myocardial infarction, and congestive heart failure. The outcomes were recorded for each patient at the time of admission and at follow-up visits. The primary endpoint was the occurrence of cardiovascular events, which included death due to cardiovascular disease, hospitalization for heart failure, and the need for cardiac surgery. We used the chi-square test for categorical variables and the t-test for continuous variables.

Results: The prevalence of valvular heart disease was 37.2%, and the prevalence of myocardial infarction was 20.5%. Congestive heart failure was present in 15.1% of patients. The presence of valvular heart disease was associated with a higher risk of cardiovascular events (HR 2.3, 95% CI 1.6–3.4). The presence of myocardial infarction was associated with a higher risk of cardiovascular events (HR 1.8, 95% CI 1.2–2.6). The presence of congestive heart failure was associated with a higher risk of cardiovascular events (HR 2.2, 95% CI 1.5–3.3).

Conclusions: Cardiovascular disease is a major cause of mortality in patients with SLE. The presence of valvular heart disease, myocardial infarction, and congestive heart failure is associated with a higher risk of cardiovascular events in patients with SLE.

Disclosure of Interest: None declared

AB0178
SUPPRESSION OF ENDOPLASMIC RETICULUM STRESS BY 4-PBA IMPROVES THE MANIFESTATIONS OF MURINE LUPUS THROUGH MODULATING REGULATORY T CELLS


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Background: Impaired function of regulatory T cells (Treg) contributes to the pathogenesis of systemic lupus erythematosus (SLE). It has been reported that the aberrant responses of T lymphocytes to endoplasmic reticulum (ER) stress in patients with SLE.

Objectives: In the present study, we investigated whether ER stress inhibition through 4-phenylbutyric acid (4-PBA) ameliorates lupus manifestation on...