CLINICAL EVALUATION OF PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS AND RHEUMATOID ARTHRITIS AND ITS CORRELATION WITH INFECTIONS CAUSED BY EPSTEIN BARR AND PARVOVIRUS B19

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BACKGROUND

Systemic Lupus Erythematosus (SLE) and Rheumatoid Arthritis (RA) are autoimmune diseases of high global prevalence and share common pathophysiological mechanisms, including genetic factors and environmental triggers. Among the environmental factors, much interest has focused on the role of viral infection, with Epstein Barr (EBV) and Parvovirus B19 (PV-19) often cited as a trigger or aggravating factor for autoimmune alterations.

MATERIALS AND METHODS

An observational, cross-sectional clinical study was carried out, including 215 patients, 126 of whom were diagnosed with SLE and 89 with RA. All patients were subjected to complete clinical and laboratory evaluation to determine the Systemic Lupus Erythematosus Disease Activity Index (SLEDAI-2K) or Disease Activity Score 28 (DAS 28). Blood collection was performed for viral DNA analysis through real-time Polymerase Chain Reaction (PCR). The level of significance was lower than 0.05 (p <0.05) for all statistical tests applied.

RESULTS

The mean age of the 126 SLE patients was 32.7 (± 0.6) years, with an average disease time of 5.8 ±5.3 years. Among the 89 RA patients, mean age was 50.1 (±12.5) years and mean disease time was 6.7 (± 10.6 years). 40.5% of the SLE patients and 82% of those with RA had active disease. The frequency of viral infection among SLE patients was 15.1% for EBV, 37.3% for PV-19, and 16.7% were positive for both viruses. Among patients with RA, 13.5% were EBV-positive only, 25.8% only for PV-19 and 36% presented co-infection. There was no correlation between viral frequency and disease activity indexes (SLEDAI-2K and DAS-28).

CONCLUSION

There was a higher occurrence of PV-19 in patients with SLE and a lower occurrence of EBV in patients with RA. EBV and PV-19 co-infection was significantly higher in patients with RA.