PREVALENCE AND CLINICAL/LABORATORY CORRELATION OF HEMATOLOGIC MANIFESTATIONS IN PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS

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BACKGROUND

The most common hematological manifestations in systemic lupus erythematosus (SLE) are anemia, leukopenia and thrombocytopenia. The aim of this study was to assess the prevalence of hematological manifestations in SLE comparing epidemiological, clinical and immunological findings of patients with/without hematological manifestations.

METHODS

This was a retrospective, descriptive and observational study, 291 records were analyzed. The continuous variables were compared using the Mann–Whitney test. The discrete variables were tested using Fisher's test, $p < 0.05$ were considered significant.

RESULTS

The mean age and the mean disease duration were 42.9 ± 13.9 years old and 11.6 ± 9.4 years, respectively. There was a predominance of females (96.2%). The most frequent hematological manifestations were lymphopenia (37.8%), leukopenia (37.5%), normochromic/normocytic anemia (35.1%) and autoimmune hemolytic anemia (AHA) (10.7%). Comparing patients with/without AHA, the prevalence of photosensitivity (64.6%; $p = 0.008$) and Raynaud's phenomenon (42.3%; $p = 0.033$) were higher in the group without AHA, while in the group with AHA, presence of leukopenia (58%; $p = 0.007$), lymphopenia (51.6%; $p = 0.039$) and thrombocytopenia (48.3%; $p = 0.020$) were significantly higher. Comparing groups of patients without/with leukopenia, there was a higher prevalence of arthralgia (87.9%; $p = 0.017$) and photosensitivity (67%; $p = 0.009$) in patients without leukopenia, whereas in patients with leukopenia, presence of nephritis (45%; $p = 0.013$), lymphopenia (71.6%; $p < 0.001$), hemolytic anemia (16.5%; $p = 0.007$), thrombocytopenia (49.5%; $p < 0.001$), seizure (11%; $p = 0.020$), ANA (70.6%; $p = 0.013$), anti-DNA (39.4%; $p = 0.011$), anti-Sm (36.7%; $p = 0.037$), positive Coombs (21.1%; $p = 0.001$), low C3 (35.8%; $p < 0.001$) and low C4 (31.2%; $p = 0.002$) were significantly higher. In patients with/without lymphopenia, patients with lymphopenia had significantly more nephritis (44.5%; $p = 0.015$), leukopenia (70.9%; $p < 0.001$), hemolytic anemia (14.5%; $p = 0.039$), thrombocytopenia (48.2%; $p < 0.001$), psychosis (7.3%; $p = 0.048$), ANA (70%; $p = 0.018$), anti-DNA (40%; $p = 0.008$), anti-Sm (37.3%; $p = 0.028$), anti-La (17.3%; $p = 0.021$), positive Coombs (20%; $p = 0.002$), low C3 (32.7%; $p = 0.003$) and low C4 (31.8%; $p = 0.001$). Comparing patients with and without thrombocytopenia, arthralgia (86.9%; $p = 0.038$) and Raynaud's phenomenon (79.6%; $p = 0.035$) were significantly higher in group without thrombocytopenia; however, in the group with thrombocytopenia had significantly more nephritis (48.4%; $p = 0.003$), leukopenia (58.1%; $p < 0.001$), lymphopenia (57%; $p < 0.001$), hemolytic anemia (16.1%; $p = 0.020$), anti-La (17.2%; $p = 0.035$), positive Coombs (23.6%; $p < 0.001$), low C3 (29%; $p = 0.046$) and positive lupus anticoagulant (10.7%; $p = 0.027$).

CONCLUSION

The hematological manifestations correlated with each other. They correlated with the presence of autoantibodies, mainly anti-DNA, and the decrease in serum complement levels, and with the presence of nephritis. The presence of such alterations should suggest a more rigorous clinical follow-up, aiming at monitoring more severe clinical manifestations in patients with SLE.

KEYWORDS

Systemic lupus erythematosus, Hematological manifestations, Lymphopenia, Leukopenia, Hemolytic anemia.