DEPARTMENT OF PATHOPHYSIOLOGY AND CLINICAL PATHOPHYSIOLOGY

21. NOVEL THERAPEUTICS IN THE TREATMENT OF SYSTEMIC LUPUS ERYTHEMATOSUS

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Background. Systemic lupus erythematosus (SLE) is a multi-organ autoimmune disease characterized by loss of immunological tolerance, the system that normally protects self components from attack by its own immune system. The current treatment approach includes antimalarial drugs, steroidal and nonsteroidal anti-inflammatory agents, and immunosuppressive drugs, including cyclophosphamide, azathioprine, mycophenolic acid, and methotrexate. Given the large body of evidence implicating abnormalities in the B cell compartment in SLE, there has been a particular focus on developing interventions that target B cells by multiple mechanisms.T cells play a pivotal role in B-cell maturation, differentiation, antibody production, and class switching. New biological T-cell therapies, including cytokine production modulation and T-cell-mediated effects on B cells, represent a new therapeutic strategy for patients with SLE.
Case report. We report a case of a female patient A, 39 y.o., admitted to Republican Clinical Hospital in february 2020. For this admittance she presented, with mild joint pain, oral ulcers and mild constitutional signs. She is known with SLE since the age of 26 (presenting with photosensitivity, arthritis, oral ulcers). Therapy with prednisolone 0.5mg/kg was started at the onset of disease, glucocorticoids being the mainstream treatment for SLE all worldwide, the disease was controlled and the patient remained on a stable maintenance dose of 10 mg/day for 2 years until the pregnancy. During pregnancy the disease was controlled with maintenance dose of prednisolone and hydroxychloroquine. Shortly after giving birth the patient developed kidney involvement with mild proteinuria up to 1g/24 hours, and hematologic anomalies with anemia, leukopenia and thrombocytopenia, diffuse alopecia, arthritis, livedo reticularis. Considering the reproductive age of the patient, it was decided to start mycophenolate mofetil (and not cyclophosphamide) initially 500mg with a gradual increase to 2 g/24 hours. Presently the patient is receiving mycophenolate mofetil 500mg tid, hydroxychloroquine 400mg od, methylprednisolone 8mg od. The lab tests upon this admittance showed preserved kidney function, only traces of protein in urine, and normal hematology.
Conclusions. Despite modern emerging biologic therapies of SLE the control of disease and preserving kidney functions may be a tricky task. The prompt choice of both efficient and safe therapy allowed for the long-term control of disease as well as preserve kidney function.
Key words: systemic lupus erythematosus, mycophenolate mofetil,biologic therapies