Real life experience of Belimumab therapy in Lupus Nephritis: A Case Report

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Abstract

Systemic lupus erythematosus (SLE) is a complex autoimmune disorder that is challenging to diagnose and manage (1). This inflammatory condition can affect multiple organs with potential for significant morbidity and mortality. The hallmark feature of the disease process is the formation of antinuclear autoantibodies, and deposition of immune complexes into tissues, contributing to organ inflammation and damage (2). Cytokines also play an important role, with B-lymphocyte stimulator (BLys), essential for B cell survival, generating a lot of interest in recent times (3).

Belimumab (Benlysta®) is a monoclonal antibody that is directed against BLyS (4). Under NICE guidance, it is licenced for use as an add on therapy to patients with active autoantibody positive SLE, despite standard therapy (5). It is not licensed for use in lupus nephritis (LN), however the very recent BLISS-LN trial demonstrated positive results in LN patients treated with belimumab versus placebo therapy (results of which are yet to be fully published) (6). In this case report, we discuss the management of an SLE patient, complicated by difficult to treat class IV LN, having failed or did not tolerate tacrolimus, cyclophosphamide and ciclosporin. There were also difficulties in attempting satisfactory control of SLE symptoms, including intolerance to methotrexate and azathioprine, difficult wean of oral steroids, and multiple hospital admissions for intravenous steroids and immunoglobulins to manage flares. The preliminary reports from the BLISS-LN trial has played a critical role in the successful management of this patient. The excellent response was noted clinically and serologically with improvements in inflammatory markers (ESR, CRP), reduction in dsDNA and increase in complement levels. Albumin creatinine ratio also showed a dramatic improvement.

This is promising move towards a targeted biologic therapy for adults with active LN and potential for concurrent management of active SLE and LN.

Biography

Shahd Elamin, I am working on Department of Rheumatology, Musgrave Park Hospital, Belfast, Northern Ireland.